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AUTOMOBILE FUEL ECONOMY STANDARDS

HEARING

BEFORE THE

SUBCOMMITTEE ON ENERGY REGULATION AND CONSERVATION

OF THE

COMMITTEE ON
ENERGY AND NATURAL RESOURCES
UNITED STATES SENATE

NINETY-NINTH CONGRESS

FIRST SESSION

ON THE

AUTOMOBILE FUEL ECONOMY STANDARDS

MAY 14, 1985

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AUTOMOBILE FUEL ECONOMY STANDARDS

TUESDAY, MAY 14, 1985

U.S. SENATE, SUBCOMMITTEE ON ENERGY REGULATION AND CONSERVATION, COMMITTEE ON ENERGY AND NATURAL RESOURCES,
Washington, DC.

The subcommittee met, pursuant to notice, at 9:37 a.m. in room SD-366, Dirksen Office Building, Hon. Don Nickles, presiding.

Present: Senators Nickles, Warner, Hecht, Evans, Johnston, Bumpers, Metzenbaum, and Rockefeller.

Also present: Allen Stayman and Faye Johnson, professional staff members; and James T. Bruce, counsel for the minority.

OPENING STATEMENT OF HON. DON NICKLES, A U.S. SENATOR FROM THE STATE OF OKLAHOMA

Senator NICKLES. Good morning. Today, the subcommittee will conduct an oversight hearing on automobile fuel economy standards.

Ten years ago, Americans were smarting from long waits in gasoline lines, shocked by the degree of our dependency on foreign oil, and anxious about an uncertain energy future. It was in that climate that Congress enacted the Energy Policy and Conservation Act, commonly called EPCA, of 1975. One of the act's provisions established the fleet fuel economy standards for passenger cars of both foreign and domestic auto producers.

Today, we have a very different picture than the one forecasters were predicting a decade earlier. After President Reagan ordered decontrol in 1981, the price of gasoline dropped significantly. We never did see the $2-a-gallon price many predicted. The United States has decreased its reliance on Middle East oil, petroleum supply far exceeds demand, and OPEC no longer has the leverage to hold American consumers hostage.

With this shift, it seems appropriate that this subcommittee would take a new look at automobile fuel economy standards. This morning, we will explore how the standards have contributed to the goal of conserving domestic energy resources, and we will compare the cost with the gain.

At this time, I am inclined to seek reevaluation of the CAFE approach. Although I favor commonsense energy conservation, it seems that imposing stiff fines and possibly jeopardizing the economic health of an entire industry is not the road that Congress should be traveling now. The corporate average fuel economy program needs some serious review, and I hope that this subcommittee and our members will join me in charting a new and sensible course.

We have several witnesses today, and I would like to request that all of our panelists and guests would try and summarize their statements if possible. We will enter their statements in the record.

I'm also pleased that our ranking minority member, Senator Metzenbaum, who I know has an interest in this, has joined us today. Senator Metzenbaum, do you have an opening statement?

STATEMENT OF HON. HOWARD M. METZENBAUM, A U.S. SENATOR FROM THE STATE OF OHIO

Senator METZENBAUM. I do indeed.

This is not a new subject for me. For those of us who were in the Congress back in that period when the CAFE standards were enacted and before that as well, I remember full well the President of the United States, President Carter, telling us that the energy shortages at that time and the challenge to our country were the moral equivalent of war.

And so there was a great hullaballoo about conserving energy resources, and we talked about having finite supply, a certain limited supply of energy. And it is as true today as it was in yesteryear. You just cannot go out and get more and more oil. Whatever you use is used up.

And it is true that today the picture has changed somewhat, not on the basis of new discoveries, but on the basis that we're using less, and on the fact that automobiles are getting better mileage, and that there have been more efficiency standards put into place. And probably more important than anything has been the fact that throughout the world there has been somewhat of a recession and therefore a lesser demand for oil.

And so we now find ourselves where we're not so tight on oil. But if there were to be some development in the Middle East, which cut off supplies from that area, the shortage would be unbelieveable. And what have we done here? We have cut back our obligation to fill SPR, the strategic petroleum reserve. The administration has failed to live up to its obligation with regard to efficiency standards for appliances. We tried in the past to do something about conservation and this is a conservation measure.

And I remember back in 1977 and 1978, some of us felt very strongly that there ought to be absolute minimums below which no car could be made or imported in this country, and those standards were 16 miles per gallon for the first year, 17 for the second, 18, 19, 20, and 21. And I remember the British Embassy calling and Rolls Royce asking for an exemption because they only got 10 miles per gallon. I thought to myself, what an absurdity that is, that Rolls Royce would ask for an exemption.

And it was the auto industry which said, "We want to be able to have averages." So at the industry's urging, Congress did not enact mandatory mileage minimums, because we were assured by the auto manufacturers that the CAFE standards would just as effectively achieve our objectives.

Now we find ourselves today with a laissez faire administration that says let the market forces prevail. What an absurdity. What an irresponsible position to take, not to be concerned about conserving our limited resources of oil. How irresponsible can we get to be?

A few years ago, the auto manufacturers came to the Congress and came to the administration and pleaded: "Help us back off imports." When we backed off imports, the American people paid about $2,500 per car more for the cars they bought, whether they were imported cars or whether they were domestic cars. And the auto industry then found that the demand was exceeding the supply, so they were able to push up the production and make cars, bigger cars with less miles per gallon.

Now they're coming before us with tears in their eyes, crying, "Please don't force us to have any penalties," and they're giving us a lot of nonsense about what will happen if we insist upon their living up to that which is the law.

Why? Why in the auto industry, with the largest companies in this country? They knew what the law was, and it was they who opted to change, who failed to live up to the standards that were required under the law. And now they're using pressure, and the administration will come here shortly and say, let economic conditions prevail, let market conditions prevail.

The auto industry, at least two-thirds of it, in my opinion is totally irresponsible in its request. And the administration, which claims to be a law-abiding administration and talks about living up to the law, is about ready to lower the restrictions as pertains to the law. This administration says to E.F. Hutton, "You only get slapped on the wrist when you violate the law"; says to General Electric, "You only get slapped on the wrist when you violate the law"; and says to the auto industry, "We'll change the law, we'll change the standards, and we'll figure out some basis, some argument as to why we're doing it."

I suppose as I look around and I start to count noses, I'm not sure where the Congress will come out on this, because of the pressures that are being brought to bear by the lobbyists. But I say that if we're responsible we'll require the auto manufacturers to do that which they're obligated to do under the law.

And if the administration truly believes in law enforcement and that the laws should be equal for all people and has any concern whatsoever about conserving our natural resources, they they too will not vary the law with respect to the obligations of the auto industry.

Thank you, Mr. Chairman.

Senator Nickles. Thank you, Senator Metzenbaum.

Senator Evans.

STATEMENT OF HON. DANIEL J. EVANS, A U.S. SENATOR FROM THE STATE OF WASHINGTON

Senator Evans. Thank you, Mr. Chairman. I am pleased to participate in today's oversight hearings on potential changes to the standards for corporate average fuel economy. I believe these are exceedingly important hearings that will play an important role in determining the direction of American energy policy for the next several years.

Frankly, I am strongly opposed to the requested rollback from 27.5 miles per gallon to 26 miles per gallon that General Motors and Ford are proposing to the Department of Transportation, and it will take substantial evidence to the contrary to convince me that that relaxation ought to be implemented.

Mr. Chairman, one word summarizes the predominant view in this country of world and domestic energy markets: complacency. We hear a lot of smug statements today, like OPEC's back has been broken, the United States has reduced its dependence on foreign oil, especially OPEC sources, the price of oil in real terms has dropped substantially over the past three years, the dollar per gallon gas is back, consumers have returned to larger and more performance oriented automobiles.

While all of these statements may be true, we must all ask ourselves, will they be true tomorrow? Because the current picture appears to be so rosy, people have apparently decided that energy conservation and reducing our vulnerability to energy supply interruptions are no longer as important as they were following the Arab oil embargo of 1973, or as important as they were following the price increases caused by the Iranian revolution.

Are we just going to fail to heed these painful lessons of recent history? I do not deny that current trends are reality, but they are in my view short-term reality. We cannot afford out of complacency or myopia to abandon the modest, yet successful, efforts that we initiated in energy conservation over 10 years ago with EPCA, the Energy Policy and Conservation Act.

We simply have not thought out what a U.S. energy strategy should be and have not applied our funds in a rational or coherent manner. There appears to be too little coordination between the various agencies and departments involved in U.S. energy policy.

Officials overlook the fact that aggressive CAFE standards could perhaps be our most cost effective energy policy. For example, improving the average miles per gallon for the entire fleet from approximately 16 to 30 miles per gallon would save about 2.1 million barrels a day, which is far more than the current imports from OPEC nations.

And I suspect that it is probable that the standards established by Congress 10 years ago helped save the American automobile industry by pushing efficient automobiles when it appeared at that time only the Japanese were willing to do so.

Technology isn't the problem. The Federal Government does not have to spend a great deal of money on these standards to achieve the expected energy saving. The automobile manufacturers were given an opportunity to meet this standard in whatever manner they felt was most appropriate.

They could choose from a variety of options. Newer, fuel efficient automobiles on sale today easily surpass 40 and some 50 miles per gallon. Diesel engines can dramatically improve the fuel economy of the overall fleet. Newer engines, combined with even lighter cars and improved aerodynamics, can improve efficiency even more.

This morning we're going to hear a lot of well-rehearsed, well-researched and rehearsed analysis and arguments against maintaining a 27.5-miles-per-gallon standard. Proponents of the rollback will cite the recent trends of softening in world oil markets and reduced dependency on OPEC oil. They will cite the demands of the marketplace and characterize CAFE as an old-fashioned and outdated intrusion into the private market.

They will speak of the need for the flexibility of the Secretary to modify the standards in line with current market conditions. While current market conditions undoubtedly have moved toward larger automobiles, some suggest that is the demand of the consumer. Well, certainly the demand of the consumer is aided measurably by the advertising programs now being carried out.

Where 10 years ago and 5 years ago the ads emphasized fuel economy and efficiency, today the ads are all zoom and swish and acceleration and performance. And just in today's paper, all you have to do is look at this: "At this rate, you could be driving in luxury. Lincoln-Mercury and Ford Credit announce 8.8 percent annual percentage rate financing on Lincoln Continental and Continental Mark VII"—neither of which I suspect meet the standards—"Because right now until June 10 Lincoln-Mercury is offering 8.8 percent annual percentage rate financing on the most luxurious car lines," and on and on about buy the big ones, that's what you really need.

Well, of course people are going to respond to that kind of marketing, and that precisely is why Ford and General Motors are coming to us seeking relaxation of the standards.

None of these arguments in my view detract from the basic proposition that the standards are a very effective conservation measure. The Government should continue to remain in the business of improving energy efficiency, and therefore the standards should be maintained.

Those companies that fail to meet the standards, given very long lead time, should face the consequences. And finally, we should think about strengthening the standards for the sake of future generations. What makes this generation unique that we should seek to use as much as possible of the world's limited supply of petroleum energy? If we relax our energy efficiency efforts today, people in the year 2000 and beyond will view such actions as selfish, wrong and shortsighted.

Thank you, Mr. Chairman.

[The prepared statement of Senator Evans follows:]

STATEMENT OF DANIEL J. EVANS
COMMITTEE ON NATURAL RESOURCES AND ENERGY
SUBCOMMITTEE ON ENERGY REGULATION AND CONSERVATION
OVERSIGHT HEARINGS ON AUTOMOBILE FUEL ECONOMY STANDARDS (CAFE)

May 14, 1985

Mr. Chairman, I am pleased to participate in today's oversight hearings on potential changes to the standards for corporate average fuel economy (CAFE). I believe these are important hearings that will play an important role in determining the direction of U.S. energy policy for the next several years. I am strongly opposed to the requested rollback from 27.5 mpg to 26.0 mpg that General Motors and Ford are proposing to the Department of Transportation. I hope, through the public debate begun by this hearing, that we can convince our colleagues in this body of the shortsightedness of such a rollback decision by the Secretary of Transportation.

Mr. Chairman, one word summarizes the predominant view in this country of world and domestic energy markets -- complacency. We hear a lot of smug statements these days, like: 1) OPEC's back has been broken; 2) the United States has reduced its dependence on foreign sources of oil, especially OPEC sources; 3) the price of oil in real terms has dropped substantially over the past three years; 4) $1.00 per gallon gas is back; and 5) consumers have returned to larger and more performance oriented cars. While all of these statements may be true now we must ask ourselves: Will they be true tomorrow?

Because the current picture appears rosy, people have apparently decided that energy conservation and reducing our vulnerability to energy supply interruptions are no longer as important as they were following the Arab oil embargo in 1973 or as important as they were following the price increases caused by the Iranian revolution. Will we fail to heed these very painful lessons of recent history?

I do not deny that current trends are realities. But they are, in my view, short-term realities. We cannot afford, out of complacency or myopia to abandon the modest, yet successful, efforts that we initiated in energy conservation over ten years ago with EPCA, the Energy Policy and Conservation Act.

In fact, even these modest policies, barely a decade old, seem to be dying a slow death on the vine of complacency and tight budgets today. A supposedly balanced program of R&D into alternative ways of producing energy has become unbalanced. Since 1981, funds for renewable energy R&D such as solar, wind, and geothermal have been severely cut, with little justification. Funds for the advanced breeder reactor have also been cut dramatically. We will need these energy technologies in the future. The Government does have a role to promote a balanced range of energy technologies by funding basic R&D up to the point of proof-of-concept, and perhaps beyond. But this Administration seems to be giving up.

On the other hand, we still continue to spend upwards of $8 billion in loan and price guarantees for the Synfuels Corporation. The technology that is being funded by the Synfuels Corporation is not particularly new or innovative. Much of it has been developed abroad. The Government has seen an important role for the support of commercial synfuels production facilities in this country. Yet it will be fortunate to be producing 75,000 barrels per day by 1990, when the drafters of the Energy Security Act of 1980 anticipated 500,000 barrels per day by 1987. The Government also has spent liberally over the years to fund the basic and applied R&D for nuclear fission and fusion technologies over the years. As late as 1983, DOE was still spending over $800 million on nuclear activities and $450 on fusion R&D.

We have not thought out what a U.S. energy strategy should be and have not applied our funds in a rational, coherent manner. There appears to be a little coordination between the various agencies and departments involved in U.S. energy policy. Officials overlook that fact that aggressive CAFE standards could perhaps be our most cost-effective energy policy. For example, improving the average miles per gallon for the entire fleet from approximately 16 to 30 mpg would save about 2.1 mmb/d. It is doubtful the Synfuels Corporation could achieve that goal at any price.

Today, we are headed back down the road of energy vulnerability. Two of the most successful energy policies in the last ten years, in my view, are being seriously eroded now.

The Administration has proposed a temporary moratorium on filling the Strategic Petroleum Reserve, which the Senate has accepted in our budget resolution. While there appears to be some justification for such a moratorium now because of the overriding need to reduce the budget deficit, I feel the pressures to keep the 1986 moratorium permanent will grow. And now we have the GM and Ford proposal to rollback CAFE standards for the 1985 model year. CAFE is the last remnant of an energy policy designed to reduce foreign dependence and increase energy efficiency. It is a sad day in Congress when we have to hold a hearing in the Senate Energy and Natural Resources Committee to raise the awareness of this issue among our members.

Technology is not the problem. The federal government does not have to spend a great deal of money on CAFE to achieve the expected energy savings. The automobile manufacturers were given an opportunity to meet this standard in whatever manner they felt was most appropriate. They could choose from a variety of options. For example, some of the newer, fuel-efficient automobiles on sale today easily surpass 50 mpg. Diesel engines can dramatically improve the fuel economy of the overall fleet. Newer engines coupled with even lighter cars and improved aerodynamics can improve fuel efficiency even further.

The most recent surveys on U.S. oil production and consumption are not encouraging. The latest EIA energy projections published in January, Annual Energy Outlook 1984 with Projections for 1995, indicate a dramatic reduction in U.S. domestic production, and an equivalent increase in net oil imports in the 1990's. The report is based on conservative assumptions of $25 per barrel and a 3.1% GNP growth rate. It projects that from 1985 to 1995, domestic production drops from 11.1 mmb/d to 7.6 mmb/d, while net oil imports rise from 5.1 to 11.7 mmb/d. Ten years is not a very long time in the energy business.

A recent study by the Office of Technology Assessment (Oil and Gas Technologies for the Artic and Deepwater) regarding the offshore oil and gas resources in the United States revealed a dramatic reduction in anticipated oil and gas reserves. Much of this is due to the disappointing results in drilling on the Alaskan North Slope: estimates have dropped from 12.2 to 3.3 billion barrels from 1981 to 1984. For the entire U.S., oil reserve estimates have dropped by 55% while gas reserve estimates have dropped by 44%. This is not encouraging news. With domestic production declining by this magnitude, one can easily point out a scenario in which oil imports will surpass their previous peak of 9.3 mmb/d in 1977.

In sum, the recent evidence from the Energy Information Administration, Department of Interior, and the OTA all point on one direction -- less oil available to the U.S. consumer in the 1990's. Hence, the need is greater than ever to maintain the current CAFE standards. In fact, we should consider raising them to a level that is reasonable in light of advancing technology. We must remember that liquid petroleum fuel is a finite fuel and it's rapidly disappearing from the earth with current rates of consumption. It is being depleted not only in the United States but in many developing countries where pressures for growth and population will put even greater pressure on this valuable resource.

This morning we are going to hear a lot of well-researched analysis and arguments against maintaining a 27.5 mpg CAFE standard. Proponents of the rollback will cite the recent trends of softening in world oil markets and reduced dependence on OPEC oil. They will cite the demands of the marketplace and characterize CAFE as an old-fashioned and outdated intrusion into the private market. They will speak of the need for the flexibility of the Secretary to modify the CAFE standard in line with current market conditions.

Yet none of those arguments, in my view, detract from the basic proposition: that CAFE is a very effective conservation measure. The government should continue to remain in the business of improving energy efficiency, and therefore the CAFE should be maintained. Those companies that failed to meet the standard should face the consequences. Finally, we should think about strengthening the standards for the sake of the future generations. If we relax our energy efficiency efforts today, people in the year 2000 and beyond will view such actions as selfish, wrong, and shortsighted.

Senator NICKLES. Thank you, Senator Evans.

Senator Johnston.

STATEMENT OF HON. J. BENNETT JOHNSTON, A U.S. SENATOR FROM THE STATE OF LOUISIANA

Senator JOHNSTON. Thank you, Mr. Chairman. Mr. Chairman, the argument about we ought to relax these standards because there's a great deal of fuel in the world could well have been made in 1978 or in 1979, and indeed those arguments were made in those days, right before the second Iranian oil embargo.

So I think the argument that we ought to relax these standards because of a surfeit of fuel, because there's too much fuel in the world, are wrong. In the first place, I think the shortage is temporary. I think it will come back. That shortage, those high prices, that spiral, will come back on us again in a matter of who knows exactly how long, but probably in a couple of years anyway. So I hope that argument will not be advanced too strongly today in favor of relaxing standards.

However, Mr. Chairman, I think there are ample other reasons for relaxing the standards other than the surfeit of fuel. The surfeit of fuel, or the surplus or whatever one wants to call it, a bubble, is too hard to ascertain and to predict to base policy on in the short term. But it seems to me what we ought to do as regulators is, first of all, regulate only where it is necessary and where we can have some confidence that we are doing good for the economy as well as the American worker.

It seems to me for us to change the law, after having so ceremoniously adopted that law, would be a mistake. In the first place, the gain in fuel savings is very marginal. In the second place, the trend toward fuel economy in our automobiles as we replace the older gas-guzzlers with the newer more efficient automobiles is where you make the real savings, not on the differences between whether there is 1 or 2 miles per gallon difference in the new automobiles coming on line today.

There is, of course, Mr. Chairman, ample precedent for doing this. In 1984, NHTSA rolled back the CAFE standard for light trucks from 21 miles per gallon to 19.5 miles per gallon, as they were authorized and empowered to do under the law.

Now, it seems to me there ought to be some certainty as to what Federal law is going to be. We have enacted a Federal law. We have given to NHTSA the authority to relax these standards. It seems to me it would be a great mistake for us now to reverse that action and try by congressional mandate to second guess the automobile industry, which after all has the biggest stake in this game, to penalize them with what some people would like to do, up to $1 billion in fines, and further, to inhibit their competitive ability in the world market.

So I will oppose taking away the authority from NHTSA.

Senator NICKLES. Thank you very much, Senator Johnston.

Senator Metzenbaum, did you have a statement to insert?

Senator METZENBAUM. Yes, on behalf of Senator Ford, I would like to insert a statement at this time.

Senator NICKLES. Certainly.

[The prepared statement of Senator Ford follows:]

STATEMENT OF HON. WENDELL H. FORD, A U.S. SENATOR FROM THE STATE OF KENTUCKY

Mr. Chairman, I believe it is important for this Subcommittee to conduct today's hearing on automobile fuel economy. The Corporate Average Fuel Economy "CAFE" standards for motor vehicles have been a significant part of our Nation's energy conservation policy.

Since 1975 when the CAFE standards were enacted as part of the Energy Policy and Conservation Act, the average fuel economy of new cars sold in the United Sates has nearly doubled. This achievement represents a tremendous savings in petroleum consumption, and has served to reduce our dependence on imported petroleum.

As the Members of this Subcommittee are aware, the two largest domestic automobile manufacturers, Ford and General Motors, have fallen below the standard recently, and have petitioned the Department of Transportation to lower the CAFE standard for model year 1986 and thereafter from 27.5 miles per gallon to 26 miles per gallon.

This Subcommittee has a responsibility to oversee the Department's response to these petitions since they affect energy consumption in this country and today's hearing is an appropriate way to carry out these responsibilities. At the same time, I believe it is extremely important for the Subcommittee to ensure that this hearing produces a balanced record to guide the Members in their assessment of the issues raised by the petitions. We must also be mindful that a public rulemaking proceeding is underway to consider these petitions.

When Congress enacted the CAFE standards it believed that consumer demand for smaller vehicles would outstrip U.S. manufacturers' ability to retool and introduce fuel-saving models. The CAFE standards when originally enacted were expected by Congress to be essentially in concert with this market trend toward smaller more fuel-efficient vehicles. Considered in this light, the standards represented a relatively mild form of intervention in the market.

Congress recognized the uncertainty of any economic forecasts when it enacted the CAFE program. It expressly granted the Secretary of Transportation the authority to adjust the standard in light of changed circumstances. In my opinion, a more clear case of changed economic circumstances could not be imaged.

I thank the Chairman and I would like to express my appreciation to the distinguished witnesses who will appear before us today. I look forward to hearing your testimony and discussing these issues with you.

Senator NICKLES. Senator Bumpers, did you have an opening statement?

Senator BUMPERS. I have and I'll submit it for the record, Mr. Chairman.

Senator NICKLES. Thank you, Senator Bumpers.

[The prepared statement of Senator Bumpers follows:]

STATEMENT OF HON. DALE BUMPERS, A U.S. SENATOR FROM THE STATE OF ARKANSAS

Mr. Chairman, I am pleased that the Energy Committee is holding this oversight hearing to consider the implementation of automobile fuel efficiency standards. Nearly 56 percent of the oil used by Americans is used as motor fuel. That statistic alone tells how important it is for us to make sure that it is used efficiently.

The current law requires automobile companies to achieve a fleet efficiency of 27.5 mpg, but both Ford and General Motors have petitioned the National Highway and Traffic Safety Administration for a rollback of the standards. This petition raises several important questions.

The most important question is that of the competitive impact of a rollback. Chrysler has complied with the standard. Will it be unduly harmed in competing with Ford and GM if they are allowed to avoid the standard? I would like to think that Chrysler's greater efficiency would give it a competitive edge regardless of the existence of standards. Our experience has shown, however, that consumers do not always value fuel efficiency as highly as we might like. There are definite signs that consumer concerns about efficiency are waning, which is cause for concern.

A second question is whether permitting a rollback would simply allow the noncomplying companies to thumb their noses at the law, or do they have legitimate arguments that imposing fuel standards is an outmoded method of achieving efficiency? I do not doubt that all of us would like to think that the actions of the market place would guarantee the proper level of energy efficiency, but our experience in the 1970's shows that the automobile market was not able to cope with sudden disruptions, to the detriment of both the country and domestic car manufacturers. Consequently, any decision on a rollback should also take into account the chances of another sudden disruption, other available countermeasures to a disruption and the possible consequences if those measures should fail.

I am very interested to hear the testimony of all of the witnesses.

Senator **Evans**. Mr. Chairman, would you just make sure that my entire statement is submitted for the record?

Senator **Nickles**. Senator Evans, we'd be happy to have your entire statement entered into the record.

Our first guest today is the Honorable Barbara Boxer, U.S. Congresswoman from California, the Sixth District.

Welcome.

STATEMENT OF HON. BARBARA BOXER, A U.S. REPRESENTATIVE FROM THE STATE OF CALIFORNIA, ACCOMPANIED BY MARC LEDBETTER, ENERGY CONSERVATION COALITION

Mrs. **Boxer**. Thank you very much, Mr. Chairman, for this opportunity to be with you this morning. With me today is Marc Ledbetter of the Energy Conservation Coalition. I have a less than 5-minute statement, if I might proceed with that.

Senator **Nickles**. Certainly.

Mrs. **Boxer**. There has been a very powerful and quiet force at work in this country since 1973, and it is energy efficiency. It, far more than any other source of energy, has made available the energy necessary for our economic growth. Without this surge in energy efficiency since 1973, our economy would now be consuming an additional 4 billion barrels of oil equivalent per year, at an annual cost of about $150 billion.

To put this in perspective, Mr. Chairman, the entire offshore oil resource in America is estimated at $12.2 billion barrels of oil that you get just once, but energy efficiency saves us 4 billion barrels of oil each and every year.

Improved auto fuel economy is a very important part of that increased efficiency. Bob Williams, a Princeton University energy analyst, estimates that 20 percent of the reduction in petroleum use among the world's major market economies is due to fuel economy improvements in U.S. cars and light trucks.

These enormous efficiency achievements have helped to soften the world oil market to the extent that oil prices have plunged, taking the pressure off inflation and significantly reducing the cost of doing business in this country. In short, Mr. Chairman, energy efficiency is critical to America's economic growth.

But now we are being asked to roll back the clock and be complacent with our success. In fact, we should be doing just the opposite, I believe. I have proposed fuel economy levels in H.R. 1024 which would raise the CAFE standard for cars to 45 miles per gallon by 1995 and the standard for light trucks to 35 miles per gallon by 1995. We have many cosponsors of that legislation.

These standards are based on studies by the Office of Technology Assessment, the Princeton University Center for Energy and Environmental Studies, and the Solar Research Institute, which show that such standards are well within our technological and economic reach.

In a House hearing held last year on auto fuel economy, where I met many of the people who are here today, Bob Williams of the center at Princeton estimated that increasing the standards for cars and light trucks to the level called for in my bill would save 2.2. million barrels of oil per day by the year 2010.

Savings of that magnitude at a time when world oil supplies are certain to be much tighter and more expensive underscore a very important point. We should not be comparing, Mr. Chairman, the proposed rollback level of 26 miles per gallon with the existing standard of 27.5 per gallon. We should be comparing the requested level of 26 miles per gallon with what is economically and technologically feasible and nationally desirable. I believe that my bill represents that level.

Yes, there are costs involved in moving fuel economy to the levels my bill calls for, but on an individual basis they are cost effective for buyers of new cars, and on a national basis we cannot afford not to do it.

Consider first the energy implications of not substantially increasing auto fuel economy. Even though we are in the midst of an oil glut, we are learning new information which may turn complacency to concern. A new OTA report that just came out last week, Mr. Chairman, concludes that exploratory oil drilling in the outer continental shelf since 1978 has been "discouraging." As a result, the Department of Interior recently lowered its estimates of economically recoverable offshore oil by 55 percent.

A May 5 Washington Post article described major changes occurring in the oil industry, where oil company investments are not going into exploration. T. Boone Pickens, Jr., chairman of Mesa Petroleum Co., is reported in the article to have said: "There are not many prospects. There are not that many opportunities. The reserves are going down."

With domestic oil reserves dwindling and world oil demand expected to grow, the United States and the world are going to have to increase their reliance on Persian Gulf countries, which in combination with Communist countries hold two-thirds of the world's oil supplies. Oil conservation, Mr. Chairman, in the United States becomes politically crucial.

Consider next the employment implications of not increasing fuel economy. To avert an even larger consumer shift away from domestic cars and consequent layoff of auto workers, competitive standards should be in place. We don't want to see our domestic car market totally abandoned or signficantly abandoned again.

In order for U.S. auto manufacturers to be competitive with imported cars, particularly Japanese cars, they are going to have to be more aggressive about fuel economy. A recent article in Automotive News projects that Japanese autos will continue to take over the North American auto market, with their market share growing at the rate of 15 percent per year through 1990, while the U.S. manufacturers' share will remain stagnant during the same period.

Another oil shock, which is well within the realm of possibility, would make less fuel efficient American cars even less desirable in the eyes of consumers and could cause more American auto companies to reach the brink of disaster.

Improved automobile fuel economy is a necessary element in our country's future. To reverse ourselves now, while we are enjoying the fruits of past wise policy, risks the health of our economy and specifically our auto companies and their tens of thousands of workers. We should not be—we should be building on the success of energy efficiency, not abandoning it.

And in conclusion, let me say again to you, Mr. Chairman, that I appreciate being here, and I think there's something of an element of patriotism in this issue. You know we have seen, much to our chagrin, in the House and the Senate what is happening with the defense contractors. They are charging taxpayers for dog kennels, for executive country clubs.

Now I think right now the automobile firms can show us that American business has a sense of patriotism, that they want to help us become oil independent, not more oil dependent. I hope that they will listen to some of you who have spoken so eloquently today. I hope they will think very carefully today before they decide to roll us back.

Thank you.

Senator **Nickles**. Thank you, Representative Boxer.

Just a quick question. You mentioned your bill has several cosponsors. How many?

Mrs. **Boxer**. Yes. Well, right now we're in the 20 range, Republicans and Democrats.

Senator **Nickles**. Have you had a hearing on your bill?

Mrs. **Boxer**. We had a hearing last year because I introduced it late in last year's session. We had a good deal and I might say extremely interesting testimony from the big three auto makers and several Members. But I think this year, with your committee's interest, we will have more interest in this entire issue.

Senator **Nickles**. And your legislation called for raising the standard to 45, an average of 45 miles per gallon by 1995?

Mrs. **Boxer**. That is correct.

Senator **Nickles**. Would the effect on that basically be to eliminate the larger cars?

Mrs. **Boxer**. We don't believe so. We believe we're talking about an average. That's what we mean by the standards. Now, as you may know, GM has the Saturn contemplated. That would get 45 to 60. Chrysler has the Liberty, 46 to 70. So we're talking about an average in the entire line.

Senator **Nickles**. But would the effect of it—granted that there may well be some cars, I think there may presently be some cars that would adapt to that standard. But would you in effect be outlawing—Senator Evans showed a car, I don't know, a Lincoln or a large Buick or something like that? Would we no longer have any large cars, if your legislation should pass?

Mrs. **Boxer**. No, that is not so.

Senator **Nickles**. Senator Metzenbaum.

Senator **Metzenbaum**. I have no questions. Thank you.

Senator **Nickles**. Do any of the other panelists have any questions of Representative Boxer?

Senator JOHNSTON. I was just going to say, the bill sounds like an excellent idea. Maybe we ought to try a test, though, first and start it on imported cars. [Laughter.]

Senator NICKLES. Representative Boxer, we appreciate your appearance before this committee and thank you very much.

Mrs. BOXER. Thank you for this chance.

Senator NICKLES. Senator Rockefeller, did you have any opening comments or statement to make?

Senator ROCKEFELLER. No.

Senator NICKLES. Thank you very much.

Our next two witnesses will be a panel. One will be the Honorable William Silvey, Deputy Assistant Secretary for Policy, Planning and Analysis for the Department of Energy; and also the Honorable Diane Steed, Administrator for the National Highway Traffic Safety Administration.

Who wishes to be first?

Mr. SILVEY. I'd like to go first, Mr. Chairman.

Senator NICKLES. Please proceed.

Before you start, Mr. Silvey, I'm going to ask all of our panelists, since we have several panelists and several interested Senators, if they might try to summarize their remarks and keep them within a 5-minute time frame. Thank you very much.

STATEMENT OF HON. WILLIAM J. SILVEY, DEPUTY ASSISTANT SECRETARY FOR POLICY, PLANNING AND ANALYSIS, DEPARTMENT OF ENERGY

Mr. SILVEY. Thank you, Mr. Chairman. I appreciate the opportunity to appear before you today to discuss the Department's views on automotive fuel economy. I'd like to give a summary of my statement.

Our national energy policy goal is to achieve an adequate supply of energy at reasonable cost. To realize this goal, our strategies are to minimize Federal control and involvement in energy markets, while maintaining public health and safety and environmental quality, and to promote a balanced and mixed resource system.

Conservation is an important part of our energy strategy. Energy efficiency is as much an energy resource as are domestic oil and natural gas reserves or baseload electric power stations. Our basic approach to both resources, supply and conservation, is the same—a market-oriented energy policy.

Automobile fuel efficiency improvements have contributed to our conservation achievements. Between 1975 and 1985, new passenger car fuel economy has almost doubled, resulting in over 1 million barrels per day of oil savings in 1985 over what would otherwise have been the case at 1975 efficiency levels. Put in different terms, automobile travel has increased by 25 percent, while motor gasoline requirements have increased less than 1 percent.

This does not mean, however, that it is necessary or desirable for the Government to mandate efficiency improvements in the transportation sector. Oil price and allocation controls that were in existence at the time that Congress enacted the fuel economy standards in 1975 prevented consumers and automobile manufacturers from getting accurate market signals on the price of gasoline and the benefits of improved fuel efficiency.

The President's action to remove oil price controls in January 1981 stimulated both the production and conservation of crude oil and products. However, the automobile industry still faces standards that were established almost 10 years ago and are not relevant to our current energy situation.

This administration believes that citizens are capable of making their own decisions, based on their own criteria of economics and individual well-being. The corporate average fuel economy standards represent the kind of intervention in the market that produces undesirable results, because regulators cannot forsee the complex interactions among technological changes, manufacturers' costs, energy prices, and changes in consumer choice.

The steady decline in fuel prices since 1981 is an example of market changes that regulators could not foresee. Given such changes, a reevaluation of the level of the CAFE standards is appropriate in acordance with the statutory criteria established by Congress.

Our understanding is that the Department of Transportation will make a decision in the early summer on whether a rulemaking is necessary. We expect to provide comments to the DOT as appropriate and would be pleased to provide the same information to this committee.

That ends my remarks, Mr. Chairman.

[The prepared statement of Mr. Silvey follows:]

STATEMENT OF WILLIAM J. SILVEY, DEPUTY ASSISTANT SECRETARY FOR POLICY, PLANNING AND ANALYSIS, U.S. DEPARTMENT OF ENERGY

Good morning Mr. Chairman and Members of the Committee, I am William J. Silvey, Deputy Assistant Secretary for Policy, Planning and Analysis, U.S. Department of Energy. I appreciate the opportunity to appear before you today to discuss the Department's views on automotive fuel economy. The increase in auto fuel efficiency over the past ten years has been a significant factor in improving America's energy situation.

Our national energy policy goal is to achieve an adequate supply of energy at reasonable costs. To realize this goal, our strategies are to minimize federal control and involvement in energy markets while maintaining public health and safety and environmental quality, and to promote a balanced and mixed energy resource system. Conservation is an important part of our energy strategy. Energy efficiency is as much an energy resource as are domestic oil and natural gas reserves or baseload electric power stations. Our basic approach to both resources, supply and conservation, is the same -- a market oriented energy policy.

The decade of the '70's was one of rapid growth in U.S. oil demand. Domestic oil consumption peaked in 1978 at almost 19 million barrels per day. Petroleum imports peaked in 1977 at

8.6 million barrels per day. By 1984 we had accomplished a major shift in our oil consumption patterns, with total consumption dropping 17 percent to 15.7 million barrels per day, imports down 3.9 million barrels per day, or 45 percent from their peak, and domestic oil production the highest it had been since 1974.

Automobile fuel efficiency improvements contributed to this achievement. Between 1975 and 1985 new passenger car fuel economy has almost doubled, resulting in over 1 million barrels per day of oil savings in 1985 over what otherwise would have been the case at 1975 efficiency levels. Put in different terms, automobile travel has increased by 25 percent while motor gasoline requirements have increased less than 1 percent.

This does not mean, however, that it is necessary or desirable for the government to mandate efficiency improvements in the transportation sector. Oil price and allocation controls were in existence at the time that Congress enacted fuel economy standards in 1975. These controls increased oil imports and prevented consumers and automobile manufacturers from getting accurate market signals on the price of gasoline and the benefits of improved fuel efficiency. This situation was remedied by the President's action to remove oil price controls in January of 1981, which stimulated both the production and conservation of crude oil and products. While regulations have not caused our improved energy position, the automobile industry still faces standards that were established almost 10 years ago and are not relevant to our current energy situation. The operations of energy markets have reduced oil imports and increased conservation. We believe that only market forces, not government controls, will bring about significant further economical improvements in automobile efficiency.

The corporate average fuel economy standards represent the kind of intervention in the market that produces undesirable results because regulators cannot foresee the complex interactions among technological changes, manufacturers' costs, energy prices and changes in consumer choice. The Reagan Administration believes that citizens are capable of making their own decisions, based on their own criteria of economics and individual well-being. In a free economy, the best way to determine the appropriate price for conserving energy is to allow that choice to be made by individual consumers operating under market price signals.

The steady decline in fuel prices since 1981 is an example of market changes that regulators could not foresee. Given such changes, a reevaluation of the level of the CAFE standards is appropriate, in accordance with the statutory criteria established by Congress. The Secretary of Transportation, under the Energy Policy and Conservation Act, has the authority to conduct such a reevaluation and on March 28, 1985 requested comments on the recently filed petitions by the Center for Auto Safety, General Motors and Ford.

Our understanding is that the DOT will make a decision in early summer on whether a rulemaking is necessary. We expect to provide comments to the DOT as appropriate and would be pleased to provide the same information to this Committee.

That ends my prepared remarks, Mr. Chairman. I will now be happy to answer any questions that you or the other Committee Members may have.

Senator NICKLES. Thank you very much, Mr. Silvey.

Ms. Steed.

STATEMENT OF HON. DIANE K. STEED, ADMINISTRATOR, NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION, DEPARTMENT OF TRANSPORTATION, ACCOMPANIED BY BARRY FELRICE, ASSOCIATE ADMINISTRATOR FOR RULEMAKING, AND JEFFREY MILLER, CHIEF COUNSEL

Ms. STEED. Mr. Chairman and members of the committee, we too are pleased to be here to discuss corporate average fuel economy. I would like to, if I could, introduce my colleagues who are here. To my immediate right is Barry Felrice, who is Associate Administrator for Rulemaking. To his right is Jeffrey Miller, who is our Chief Counsel.

In the early part of the 1980's, the strong market demand for fuel efficient cars enabled the manufacturers to rapidly increase fuel economy and to exceed the required CAFE levels for those intermediate years.

Senator NICKLES. Ms. Steed, could you pull the microphone up real close.

Ms. STEED. The auto manufacturers have steadily incorporated new fuel-saving technology into their vehicles. They have reduced weight by downsizing and material substitution, and have made great improvements in efficiency through better transmissions, better aerodynamics, and electronic engine controls. Even the least efficient of the new domestic cars is more fuel efficient than many of the so-called economy cars of 15 years ago.

Although the demand for small cars has abated to some extent in the last 2 years, the CAFE levels actually achieved by the manufacturers have, nonetheless, continued to increase. The CAFE levels for the domestic fleet rose from 24.2 miles per gallon in model year 1983 to estimates of 25.3 miles per gallon in 1984 and 25.7 miles per gallon in 1985. This contrasts with an estimated CAFE achievement level of approximately 15 miles per gallon in model year 1975, when the act was passed.

We expect the rate of increase will continue to be determined by the factors of new technology and consumer demand. The shift in the market away from smaller cars could cause CAFE achievement levels to rise less rapidly or perhaps even to decline. Such a shift could offset or even exceed the CAFE gains from improved technology.

It is the administration's position that market factors, rather than CAFE standards, are the most efficient means of achieving appropriate levels of fuel economy in the long run. The laws of supply and demand and the market will balance the desire of the motoring public for fuel efficiency and other product attributes, such as performance, durability, handling, comfort, or other characteristics associated with the specific manufacturer.

With the decontrol of oil prices, today's oil market is demand responsive, unlike the controlled market of the mid-seventies when the act was passed. We have therefore opposed efforts to set higher CAFE levels by statute.

The question of whether adjustments should be made in CAFE levels was also presented by administrative petitions for rulemaking that have been received from some manufacturers who claim that even 27.5 miles per gallon is not feasible. I'd like to turn to a brief discussion of where we are in the rulemaking activities.

First of all, I should emphasize that our rulemaking deliberations are governed by criteria spelled out in the act. NHTSA is required to establish maximum feasible fuel economy levels, which are to be determined on the basis of specific factors, including technological feasibility, economic practicability, and energy conservation needs.

The agency has recently received three petitions for rulemaking to amend the fuel economy standard for passenger cars. Our action in granting these petitions means that we will review all available information to determine whether rulemaking is warranted. It does not necessarily represent a commitment on our part to take further rulemaking action.

The first of these petitions was filed last summer by the Center for Auto Safety. It seeks an increase in the standard to 31.5 miles per gallon for model year 1987, with subsequent annual increases in 3 miles per gallon increments to 40.5 by model year 1990. The other two petitions, filed by General Motors and Ford, request a reduction in the standard for model years 1986 and beyond to 26 miles per gallon.

The notices we published in the Federal Register reflecting our grant of the petitions requested comments on the fuel economy of the manufacturers. Both GM and Ford have cited the possibility of severe economic harm if the standards are not lowered, and the time remaining for the start of the model year is very short.

Because we are in rulemaking, we cannot indicate at this point what the outcome of the process will be. Our initial review of the comments shows, however, as does this committee's discussion this morning, that there are very strong views on both sides of the issue. Whether or not we decide to initiate rulemaking to revise the standard, the issues raised by the petitioners require expeditious response, and we therefore intend to move as quickly as we can to address the issues raised by the petitions.

We are also involved in a light truck fuel economy rulemaking, and we have outstanding a notice of proposed rulemaking for model year 1987 light trucks. We are also in litigation over light truck standards for model years 1985 and 1986.

In October 1984, the agency issued a final rule lowering light truck CAFE standards from 21 miles per gallon to 19.5 in model year 1985 and established a 20-miles-per-gallon standard for model year 1986. We denied petitions for reconsideration of these standards on March 15.

Several organizations have challenged these standards in the U.S. Court of Appeals for the District of Columbia. According to a press release, the petitioners contend that NHTSA failed to set standards at the maximum feasible levels required by the act, and they seek a court order to raise truck CAFE standards to 21 miles per gallon and 21.5 miles per gallon for model years 1985 and 1986, respectively.

We are currently preparing a record of the rulemaking proceeding for filing with the court, after which the parties will submit their briefs and then make oral arguments. It is not clear at this time how long the subsequent court proceedings will take.

This completes my statement, Mr. Chairman. My colleagues and I would be happy to try and answer any questions that you may have.

[The prepared statement of Ms. Steed follows:]

STATEMENT OF DIANE K. STEED, ADMINISTRATOR
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
BEFORE THE SUBCOMMITTEE ON ENERGY REGULATION AND CONSERVATION
OF THE SENATE COMMITTEE ON ENERGY AND NATURAL RESOURCES
ON THE AUTOMOTIVE FUEL ECONOMY PROGRAM

MAY 14, 1985

Mr. Chairman and Members of the Subcommittee:

I am pleased to appear before you today to discuss the automotive fuel economy program. This is my first appearance before your subcommittee, and I look forward to hearing your views. With me at the witness table are Barry Felrice, our Associate Administrator for Rulemaking, and Jeffrey Miller, our Chief Counsel.

I will give you a brief overview of the fuel economy program, review the status of current rulemaking and litigation issues, and then invite any questions you might have.

THE FUEL ECONOMY PROGRAM

In the aftermath of the Arab oil embargo of 1973-1974 that led to gasoline shortages, Congress determined that the existing automotive fuel economy levels were unacceptably low. As a result of this concern and determination, the Energy Policy and Conservation Act of 1975 was enacted, which added a new Title V to the Motor Vehicle Information and Cost Savings Act to establish fuel economy requirements for passenger cars and light trucks. For passenger cars, the Act directed each auto manufacturer to achieve progressively higher corporate average fuel economy (CAFE) levels beginning at 18 miles per gallon in model year 1978 and increasing to 27.5 miles per gallon in model year 1985 and thereafter. The Secretary of Transportation was given administrative authority to determine the intermediate levels in model years 1981-1984, and to adjust the standard from 27.5 after model year 1985 if necessary. The Act also required the Secretary to set separate fuel economy standards for light trucks each year. These responsibilities have been delegated to our agency.

For both passenger car and light truck CAFE standards, the Act requires us to determine the "maximum feasible fuel economy level" for a model year. The Act establishes fines for manufacturers who fail to meet the CAFE standard, but also permits them to offset these fines with accumulated past credits or estimated future credits for exceeding the standard.

Intermediate fuel economy levels for 1981-1984 were established by the agency in 1977, leading to a standard of 27.5 mpg for model year 1985 and thereafter. Throughout the early part of the 1980's, the strong market demand for fuel-efficient cars enabled the manufacturers to rapidly increase fuel economy and to exceed the required CAFE levels for those intermediate years. The auto manufacturers have steadily incorporated new fuel-saving technology into their vehicles. They have reduced vehicle weight dramatically by downsizing and materials substitution, and have made great improvements in efficiency through better transmissions, better aerodynamics, and electronic engine controls. Even the least efficient of the new domestic cars is more fuel-efficient than many of the so-called economy cars of 15 years ago.

Although the demand for small cars has abated to some extent in the last two years, the CAFE levels actually achieved by the manufacturers have nonetheless continued to increase. The CAFE levels for the domestic fleet rose from 24.2 mpg in model year 1983 to estimates of 25.3 mpg in 1984 and 25.7 mpg in 1985. This contrasts with an estimated CAFE achievement level of approximately 15 mpg in model year 1975, when the Act was passed. We expect that the rate of increase will continue to be determined by the factors of new technology and consumer demand. Consumer demand is to a large extent outside the control of the manufacturers, although the manufacturers may, to some extent, influence demand through their marketing and pricing strategies. A shift in market demand away from smaller cars could cause the CAFE achievement levels to rise less rapidly or perhaps even to decline. Such a shift could offset or even exceed the CAFE gains from improved technology.

It is the Administration's position that free market factors, rather than CAFE standards, are the most efficient means of achieving appropriate levels of fuel economy over the long run. The laws of supply and demand, and free market pricing, will balance the desire of the motoring public for fuel efficiency and other product attributes such as performance, durability, handling, comfort or other characteristics associated with a specific manufacturer. With the decontrol of oil prices, today's oil market is demand responsive, unlike the controlled market of the mid-1970's when the Act was passed. We have, therefore, opposed efforts to set higher CAFE standards by statute. Passenger car CAFE levels as high as 45 mpg have been proposed for the 1990's in some bills. We are not aware of any evidence to support the feasibility of these levels when economic practicability is considered. Regardless of feasibility, however, the result of such legislation would be to restrict the types of vehicles available to American consumers, thus denying them the larger and more powerful vehicles which are currently available. It could also reduce the levels of sales, investment and employment in the domestic auto industry.

The question of whether adjustments should be made in CAFE levels is also presented by administrative petitions for rulemaking that have been received from some manufacturers who claim that even 27.5 mpg is not feasible. I want to turn now to discuss our current rulemaking activities.

CURRENT RULEMAKING

First, I should emphasize that our rulemaking deliberations are governed by the criteria spelled out in the Act. NHTSA is required to establish "maximum feasible fuel economy levels," which are to be determined on the basis of specified factors, including technological feasibility, economic practicability, and energy conservation needs.

We have recently granted three petitions for rulemaking to amend the fuel economy standards for passenger cars. Our action means that we will review available information to determine whether rulemaking is warranted, but does not represent a commitment on our part to take further rulemaking action. The first of these petitions, filed last summer by the Center for Auto Safety, seeks an increase in the standard to 31.5 mpg for model year 1987, with subsequent increases of 3 mpg per year to 40.5 mpg by model year 1990. The other two petitions, filed by General Motors and Ford, request a reduction in the standard for model year 1986 and beyond to 26 mpg. The notices we published in the Federal Register, reflecting our grant of the petitions, requested comments on the fuel economy capability of manufacturers.

Both General Motors and Ford have cited the possibility of severe economic harm if the standards are not lowered, and the time remaining before the start of the model year is very short. The comment period closed on April 29. We are now evaluating the comments as well as the petitioners' answers to our prior requests for more specific information.

Because we are in rulemaking we cannot indicate at this point what the outcome of this process will be. Our initial review of the comments shows that there are strong views on both sides of the issue. Whether or not we decide to initiate rulemaking to revise the standard, the issues raised by the petitions need an expeditious response. We therefore intend to move quickly to address the issues raised by the petitions.

We are also involved in rulemaking for light truck fuel economy. We have outstanding a notice of proposed rulemaking to set standards for model year 1987. We plan to issue a final rule shortly. We also plan shortly to issue a notice of proposed rulemaking to set light truck standards for model year 1988.

FUEL ECONOMY PETITIONS

On October 16, 1984, the agency issued a final rule lowering the light truck CAFE standard from 21.0 mpg to 19.5 mpg for model year 1985 and establishing a standard of 20 mpg for model year 1986. We denied petitions for reconsideration of these standards on March 15, 1985. Several organizations, including the Center for Auto Safety, have challenged these standards in the U.S. Court of Appeals for the District of Columbia. According to a press release, the petitioners contend that NHTSA failed to set the "maximum feasible" standards required by the Act, and they seek a court order raising the light truck CAFE standards to 21.0 mpg and 21.5 mpg for model years 1985 and 1986, respectively. The agency believes that its action was fully in accord with the statute and well justified by the record.

We are currently preparing the record of the rulemaking proceeding for filing with the court, after which the parties will submit their briefs and then make oral arguments. It is not clear at this time how long the subsequent court proceedings will take.

Mr. Chairman, this completes my prepared remarks. I would be glad to try to answer any questions you may have.

Senator **Nickles**. Thank you, Ms. Steed. We appreciate your appearance.

You mentioned this latest court case and you said that you are not sure how long the court proceedings will take. Was this action initiated by the Center for Auto Safety?

Ms. **Steed**. Yes, sir, among other petitioners.

Senator **Nickles**. And is this a court case that was just filed recently?

Ms. **Steed**. Yes, sir.

Senator **Nickles**. So there is really no way to predict the outcome.

You have the flexibility in the present statute, EPCA, to make some adjustments for the 1985 or 1986 model year; is that not correct?

Ms. **Steed**. Yes, we do. The statute requires us to take into account a number of factors, including technological feasibility, economic practicability, and so forth. We look at those factors and have the authority to adjust the standards.

Senator **Nickles**. So the law was actually written to give you flexibility because the law was written in 1975 and it set these 10-year goals, with incremental standards, with the final figure of 27.5 miles per gallon, set for 1985 or 1986?

Ms. **Steed**. 1985 and beyond.

Senator **Nickles**. 1985 and beyond. But when the law was written in 1975—that was before my time, although Senator Johnston and others might remember it—the Congress did put in some flexibility that would allow you to adjust that standard after considering the several factors which you have mentioned?

Ms. **Steed**. That's correct.

Senator **Nickles**. And that is what you are in the process of trying to accomplish in your rulemaking?

Ms. **Steed**. That is exactly right, because we have been petitioned by parties on both sides of the issue. We are looking at the full range of issues on whether standards should be raised or lowered.

Senator **Nickles**. OK. I know you can not go into too much detail. Can you give us any idea about the timing of your rulemaking?

Ms. **Steed**. Well, for a number of reasons, including statutory requirements, we have to act very quickly, because the law requires us to set standards 18 months before the model year begins. In addition, we cannot change the standard once the model year begins. So we have a very tight timeframe, and we intend to make the decision and announce it publicly in the early summer, I would hope in early June.

Senator **Nickles**. Probably in early June?

Ms. **Steed**. I hope early June.

Senator **Nickles**. You mentioned the need to set standards 18 months before the model year begins. Is that correct?

Ms. **Steed**. That is if we raise it, it has to be done 18 months before.

Senator **Nickles**. So the 18 months applies if it is to be raised, however, two of the petitions that you are considering to reduce the CAFE standard from what?—27 miles per gallon to 26 miles per gallon?

Ms. Steed. 27.5 to 26 miles per gallon.

Senator Nickles. And I'll ask this to either Mr. Silvey or to Ms. Steed. A lot of people have made the statement: The reason why we have increased fuel economy in automobiles today is because of this law that is on the books. Would you care to respond to that?

Is it your belief that this law is the reason why we have the increased fuel economy today, or was it caused by market forces or a combination of the two?

Ms. Steed. I would say it's a combination of both. The oil embargo in the early seventies no doubt drove consumer demand to more fuel-efficient cars. But we also believe that the standards have been technology-forcing to some extent.

Senator Nickles. Mr. Silvey.

Mr. Silvey. Well, from the Department's point of view, we think that there's a possibility that the standards helped the automobile industry get a leg up. But as far as the level of fuel economy in the country, the market clearly has been the determining factor.

Senator Nickles. Senator Metzenbaum.

Senator Metzenbaum. Mr. Silvey, I first would just like to correct the record, because you indicated something about the President's decontrolling oil having stimulated production, and my understanding is that in 1984, production was 10.7 million barrels a day, and that's about a half million barrels a day less than it was 11 years ago. And as the Alaska fields start to play out, that will go down rapidly.

And the fact is that our own reserves, proved reserves, according to the Energy Information Administration, part of your Department, have gone down from 31.8 billion barrels in 1977 to 27.7 billion in 1983. So that to say that we have so much oil and that's one of the reasons you can consider reducing the standards, I think doesn't fit in with the facts as they are.

Mr. Silvey. Senator, I didn't connect the two of those at all, and I agree with your point that oil production in 1984 was the highest since, I believe the year was, 1974. I don't have the statistics at my fingertips, but it's clear that regulation was keeping production down, because we were basically subsidizing imports, Senator.

Senator Metzenbaum. So that you and I don't misunderstand what I'm saying, I'm saying that production in 1984 was a half million barrels a day less than it was in 1973, and our proved reserves are about 4 billion barrels less than they were in 1977.

But let me go on with my questions, so we don't get into a debate on that. I am a little confused by your remarks. First you say that the CAFE standards have made a key contribution to energy security, saving over 1 million barrels a day. But then you say CAFE standards represent the kind of intervention in the market that produces undesirable results.

Now that would seem to me to be a bit contradictory. I would gather that saving 1 million barrels a day and improving our energy security is indeed very desirable.

Mr. Silvey. Senator, I believe you misinterpreted my remarks. I did not say that the CAFE standards had contributed to the conservation achievements. I said that automobile fuel efficiency improvements have contributed and have resulted in savings of 1 million barrels per day. But the source——

Senator **Metzenbaum**. You don't think those standards helped at all?

Mr. **Silvey**. Senator, I believe the CAFE standards made it very clear, at a time when we were under oil price and allocation controls, that there was going to have to be an improvement in that part of the market, and therefore when the market finally was hit in 1979 with the Iranian revolution, and the price of oil doubled, the market was better prepared and ready to bring on those models, because perhaps the CAFE standards at that point had alerted the industry and had them prepared to do that.

Senator **Metzenbaum**. You also say that only market forces will bring about significant further economical improvements in automobile efficiency. But I have difficulty in comprehending that, since Ford and GM are requesting a rollback on the claim that the current market situation does not encourage fuel efficiency.

Are they wrong?

Mr. **Silvey**. I think the term "economic" is key to that discussion, Senator, and at this point I think also that, from my understanding of consumer preferences, that there is a clear understanding that automobile fuel efficiency has increased appreciably over the last decade. And it is my understanding that particular element of consumer preference, which was No. 1 in car selection in 1981–82, has now dropped appreciably in position.

Senator **Metzenbaum**. Well, let me ask you this. It takes 3 to 4 years or maybe longer to develop new product lines for an automobile manufacturer; is that correct?

Mr. **Silvey**. I would have to defer to Ms. Steed on that.

Ms. **Steed**. That's correct, Senator.

Senator **Metzenbaum**. Ms. Steed is indicating it is. And how fast can a crisis or a severe disruption occur?

Mr. **Silvey**. It can occur overnight, Senator.

Senator **Metzenbaum**. So how can you really believe that the auto industry can react to sudden shifts in the market. If we're building large cars here and a disruption hits, do we just keep buying those large cars while manufacturers adjust? Or do we send all our business to Japan and Germany?

Mr. **Silvey**. Senator, if a disruption were to last long enough to change the price of oil for an extended period of time, the automobile industry, at whatever level they happen to be at the time the disruption hit, would certainly be able to adjust, begin to adjust, and it would continue that adjustment.

But where you and I differ, I believe, is on our belief of whether the CAFE standards, fuel efficiency standards, will have a significant impact on lessening the impact of an oil supply disruption far beyond what the market would do, and I don't agree with that.

Senator **Metzenbaum**. If there was a disruption of oil supplies, how long would it take for prices to react?

Mr. **Silvey**. Prices should react very quickly, Senator. Just the threat of an oil supply disruption, if it's perceived by the public to be real.

Senator **Metzenbaum**. If you remember back to 1979–1980, there was no shortage, but oil companies kept their ships offshore while the prices just zoomed. And the American people stood in lines trying to get oil. There was no real shortage. It was an artificial shortage created by the industry.

Mr. **Silvey**. That was under price and allocation controls, which are not in place today. And the price could react very quickly, and the price could not at that time, Senator, as you will recall.

Senator **Metzenbaum**. The price did react. The price indeed did react.

Mr. **Silvey**. The way the regulations were written at that time, there was about a 60-day hiatus as the oil that left the Persian Gulf had to transit the ocean, and the price did not react until about 60 days later, sir.

Senator **Metzenbaum**. Mr. Chairman, I think my time has expired, but I do have a round of questions I'd like to ask Ms. Steed after the others have had their opportunity.

Senator **Nickles**. Certainly. Senator Evans.

Senator **Evans**. Thank you, Mr. Chairman.

Ms. Steed, I may be confused. You said that you had to have an 18-month lead time before modifying or changing standards. Isn't it my understanding that the release being sought is for the 1986 model year, which starts just 4 or 5 months from now?

Ms. **Steed**. The 1986 petitions, affecting 1986 model year, are to lower the standard, and the statutory requirement for an 18-month lead time is to raise the standard.

Senator **Evans**. OK. You say in your statement that laws of supply and demand and market pricing will balance the desire of the motoring public for fuel efficiency and other product attributes. I think we all believe generally that that's the case, as long as you do not go beyond Economics 101.

Do you believe that consumer preference is at all affected by marketing decisions and advertising of the automobile companies?

Ms. **Steed**. I think they are to some extent, yes, sir.

Senator **Evans**. Would you say it's affected to a small, moderate, or to a fairly large extent?

Ms. **Steed**. I would think the consumers of this country have a number of factors to consider as they decide to buy a car. It would vary a great deal among different classes of consumers.

Senator **Evans**. Just on the average, would you say it's small, moderate?

Ms. **Steed**. Probably moderate.

Senator **Evans**. Madison Avenue would be disappointed, I suppose, in that response. But even at the moderate level, it seems to me that that's an important marketing decision made voluntarily and independently by the automobile companies with full knowledge of what the consequences would be.

Wouldn't you agree with that?

Ms. **Steed**. I'm sorry, Senator.

Senator **Evans**. Wouldn't you agree that those marketing decisions, which part of their automobile fleet to advertise and to push, is a free market decision made by the automobile companies with full knowledge of the consequences in terms of the average fuel efficiency of their fleet?

Ms. **Steed**. Yes, I believe that's true.

Senator **Evans**. Wouldn't the end result of that line of logic lead you to believe that they didn't care very much about whether they met the standards or not ?

Ms. **Steed**. No, I disagree with that. I think they do care both from an energy standpoint and from a legal standpoint. Not only does failure to meet the standards require them to pay fines; failure also puts them in an unlawful situation, and they care very much about that.

Senator **Evans**. In talking about the laws of supply and demand, would you say that we have a completely free automobile market today?

Ms. **Steed**. Completely free?

Senator **Evans**. Uh-hmm.

Ms. **Steed**. Pretty much free. It is regulated in various ways, from an emissions standpoint and so forth. So the Government requirements do influence auto manufacturers' decisions.

Senator **Evans**. Would you say that the Japanese believe it's a free market for automobile sales in the United States?

Ms. **Steed**. I would expect that they would disagree with that statement.

Senator **Evans**. In other words, we don't have a totally free market in terms of automobile sales in this country, isn't that true?

Ms. **Steed**. Not entirely.

Senator **Evans**. If there was a totally free market in terms of automobiles, do you think Japanese imports would increase their sales in this country?

Ms. **Steed**. They have predicted that they would increase it, yes, sir.

Senator **Evans**. Why?

Ms. **Steed**. Pardon?

Senator **Evans**. Why?

Ms. **Steed**. Consumer demand for their product.

Senator **Evans**. Which is a high efficiency, high mileage product?

Ms. **Steed**. Yes, in part. That's one of the reasons that they would increase their sales.

Senator **Evans**. That seems to fly in the face of the assertions of at least two out of the three major automobile manufacturers that consumer demand is the other way. It just seems to me that if we had a completely free and open market and people wanted bigger and more comfortable cars, that you wouldn't have to worry much about Japanese competition.

Ms. **Steed**. Well, I think you've seen in the last few months that the Japanese auto manufacturers are responding to consumer demand also, and they are beginning to introduce larger models into this country.

Senator **Evans**. Mr. Silvey, you say essentially the same thing, that only market forces, not governmental controls, will bring about significant further economical improvements in automobile efficiency. Does that mean that you would advocate the removal of any restrictions from the import of Japanese automobiles into this country?

Mr. **Silvey**. Senator, I don't believe the Department has a position on that particular point.

Senator EVANS. Well, how about you? You certainly must have some opinion as to whether that fits within the nature of a free market or not.

Mr. SILVEY. Yes, Senator, it does. And from a personal point of view, yes.

Senator EVANS. What is your opinion as to what would happen if we opened the markets to Japanese imports, with their noted fuel efficiency, and if, in fact, that increased the sales of Japanese imports? I noticed last month their sales are up 20 percent, incidentally, in terms of Japanese imports into the United States.

What would that do to the overall efficiency of our automobiles in this country that are purchased?

Mr. SILVEY. It is possible that the efficiency would go up. But I don't believe that anyone can absolutely predict what would happen, because with that and with the U.S. manufacturers freed, I don't think that anybody can predict exactly what the mix would be.

Senator EVANS. I'm sure that that's true. But on the one hand you're both testifying that it would be inappropriate to interfere with market forces, but on the other hand you both testify that we're already doing that significantly in terms of restriction of automobile imports.

And it sounds a lot to me like being half pregnant. You know, we either believe in total market freedom or we believe that there are governmental restrictions that from time to time make some sense.

Ms. Steed, how long did the automobile companies have to prepare for the efficiency standards which were established for the 1986 model year?

Ms. STEED. They have known that the standard was 27.5 miles per gallon for 1985 and beyond for about 10 years.

Senator EVANS. Ten years to prepare. Did all fail to do it?

Ms. STEED. No, sir, not all are going to miss the 27.5 miles per gallon standard.

Senator EVANS. Who is going to make it?

Ms. STEED. I believe many of the Japanese manufacturers, Chrysler, and others. I can give you specifics. These are the ones that will not make it: Ford, General Motors, BMW, Ford imports, Jaguar, Mercedes-Benz, Peugeot, Saab, and Volvo will not make it by our current projections.

Senator EVANS. I must say our two domestic manufacturers are in an elite group of those automobile imports who won't make it.

I may have some other written questions, Mr. Chairman, but I'll defer right now to my colleagues.

Senator NICKLES. Thank you, Senator Evans.

Ms. Steed, would you include the chart as part of your statement, as far as the ratios, I guess, or fuel economy standards that the automobile manufacturers have made?

Ms. STEED. We'd be happy to.

[The chart referred to follows:]

PASSENGER CAR CAFE LEVELS
(no EPA adjustment)

Manufacturer	1978	1979	1980	1981	1982	1983	1984*	1985*
Standard:	18.0	19.0	20.0	22.0	24.0	26.0	27.0	27.5
American Motors	18.6	19.9	21.5	22.4	[23.9]	33.5	35.5	33.3
Chrysler	18.4	20.5	21.7	26.1	27.2	27.0	27.1	27.5
Ford	18.4	19.2	22.1	23.4	24.6	[23.8]	[25.1]	[25.5]
General Motors	19.0	19.1	21.9	23.2	24.2	[23.5]	[24.3]	[25.1]
Alfa Romeo	21.4	20.7	21.7	22.5	24.6	[25.2]	[26.6]	[27.3]
AMC-Renault	30.4	30.3	33.3	29.4	32.4	31.4	33.2	31.2
Bertone	N/A	N/A	N/A	N/A	N/A	29.1	29.2	29.2
BMW	19.7	20.1	25.9	26.6	26.4	[25.6]	27.3	[25.6]
Chrysler-Mitsubishi	30.6	32.3	32.5	32.0	33.1	33.9	37.0	34.9
Fiat	21.7	26.4	26.6	27.6	25.7	[13.2]	N/A	N/A
Ford Imports	37.3	32.1	29.8	34.3	34.4	35.4	34.9	[25.0]
Honda	33.7	29.0	29.2	30.8	33.4	35.3	35.2	34.0
Isuzu	N/A	N/A	N/A	34.7	37.6	30.7	29.3	28.1
Jaguar	21.1	21.2	21.6	[18.5]	[18.8]	[18.8]	[19.0]	[19.0]
Mazda	35.5	25.6	26.0	31.1	29.4	28.9	30.7	29.3
Mercedes-Benz	19.2	20.5	23.9	25.6	26.3	26.6	[25.4]	[23.4]
Mitsubishi	N/A	N/A	N/A	N/A	N/A	30.2	30.4	32.0
Nissan (Datsun)	26.8	26.8	31.2	30.5	30.7	32.7	31.6	29.3
NUMMI (GM-Toyota)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	36.6
Peugeot	24.8	23.8	27.2	27.9	27.6	[25.1]	[24.5]	[24.8]
Pininfarina	N/A	N/A	N/A	N/A	N/A	28.9	27.9	27.9
Porsche	(included in Volkswagen)							[25.5]
Saab	22.7	21.7	23.4	23.3	24.1	[25.9]	[25.2]	[25.5]
Subaru	29.4	29.0	27.9	31.2	31.6	32.4	33.3	33.0
Toyota	26.8	24.0	27.4	30.9	30.5	32.6	32.9	33.2
Volvo	21.2	21.0	21.6	22.3	24.6	[25.8]	[26.4]	[26.5]
Volkswagen	27.2	28.6	31.3	34.2	32.9	30.0	28.9	29.8

Figures in [brackets] indicate CAFE values below that year's standard. Because of the availability of carryforward/carryback credits, this generally does not indicate noncompliance.

*Manufacturers' estimates as submitted to NHTSA in semi-annual reports.

Senator **Nickles**. Thank you.

Senator Johnston.

Senator **Johnston**. Thank you very much, Mr. Chairman.

Mr. Silvey, I was hoping that we would come here this morning and hear an analysis by the Administration of technology, economics, market share, energy projections, and that sort of thing, in support of the power of NHTSA to control these standards, which is I think where the judgment ought to be made.

But instead, it seems to me that all I hear is that the free market, right or wrong, the free market. And that doesn't sell very well, at least with me, for the reasons that Senator Evans pointed out in his testimony and in his questioning, and also because some of us were here in 1978 and 1979 when the free market signals gave all the wrong indications.

I very well remember 1978. I proposed a gasoline tax to be rebated to the consumer at 50 cents, 10 cents a year. I try to forget that at election time. Since my election was last year, I can mention it now.

But the reason for it, of course, is obvious. That we were building the big gas-guzzling cars at that time, and I thought I could see, and many of us on this committee thought that we could see, an impending energy shortage, and Detroit was going in all the wrong directions, relying on what they saw as the signals of the free market immediately transmitted to them, which said big cars sell, small cars don't. We didn't do anything from the standpoint of regulation up here, and it was disastrous for the American automobile market.

Now, do you have that kind of faith? Do you think the free market is now telling us what is going to happen in terms of energy consumption over the next 2 or 3 years?

Mr. **Silvey**. Sir, I believe you're getting much better market signals in both producers and consumers than they were getting to both 1978 and 1979, when as you recall we were under Federal price and allocation controls. It's really interesting to note what happened in that period from 1973 to 1978, where our imports, after the shock of the oil embargo, actually increased by almost 50 percent, going up from 6 million barrels a day to almost 9 millions barrels a day.

And that is the time that this regulation was put in place, and that's the time that people were not getting appropriate market signals. Yes, sir, I do believe that the market is giving much clearer, much better signals today. Consumers have a wide variety of choices.

Senator **Johnston**. What is the market signaling is going to happen in terms of fuel in the future, and how can the market know that?

Mr. **Silvey**. Sir?

Senator **Johnston**. I say, what is the market signaling as to what is going to happen to crude oil in the future, what OPEC is going to do, what is going to happen in the Middle East, what world oil supplies are? And how can the market possibly indicate that any better than it did in 1978 and 1979?

Mr. **Silvey**. Senator, you are correct in that if there is a disruption, the signals are not going to be there today that would say that there is going to be an oil supply disruption of a size to cause a major price increase. We would hope that we would have some notice of that, but it is not going to affect decisions on automobiles, that is true.

Senator **JOHNSTON**. Has your office conducted any analysis on CAFE standards and future energy demand?

Mr. **SILVEY**. Yes, sir, we have conducted some.

Senator **JOHNSTON**. Where are those?

Mr. **SILVEY**. I can give you a list of those for the record, Senator, and I can also provide copies of the analyses that we have developed.

Senator **JOHNSTON**. It seems to me that if we are studying the CAFE standards and have a hearing on them, surely we ought to have those here today.

Mr. **SILVEY**. Senator, most of the work that we have done in that area is not recent, other than what we are doing right now in preparation for the rulemaking that's under way.

[Subsequent to the hearing the Department of Energy submitted the following:]

Attached are a list and copies [1] of reports, analyses, and papers prepared by DOE staff and contractors that relate to automobile fuel economy, the CAFE standards, and future energy demand.

REPORTS AND ANALYSES BY THE DEPARTMENT OF ENERGY STAFF AND CONTRACTORS ON AUTOMOTIVE FUEL ECONOMY AND ENERGY IMPACTS

DOE staff analyses, reports and technical papers

1. "Monthly Data Report #22," Phil Patterson, Office of Vehicle and Engine R&D, U.S. DOE, May 1985.
2. "Dynamics of Light Duty Vehicle Fuel Economy—1978 to 1984," Phil Patterson, et al., U.S. DOE, SAE Paper 850527, February 1985.
3. "Monthly Data Report #16," Phil Patterson, Office of Vehicle and Engine R&D, U.S. DOE, May 1984.
4. "Reasons for Changes in MPG Estimate, Model Year 1978 to the Present," Phil Patterson, et al., U.S. DOE, SAE Paper 840500, March 1984.
5. "Impact of Consumer and Manufacturer Decisions on New Car Fuel Economy," Phil Patterson, et al., U.S. DOE, SAE Paper 830545, February 28, 1983.
6. "United States Automobile Fuel Economy Policies and Consumption Effects," Barry McNutt, U.S. DOE, August 1982.
7. "Cost Effectiveness of 1985 Automobile Fuel Economy Standards," Carmen Difiglio, et al., U.S. DOE, SAE Paper 790930, October 1, 1979.

DOE contractor reports

8. "Motor Vehicle MPG and Market Shares Report: Model Year 1984," Oak Ridge National Laboratory, U.S. DOE, January 1985.
9. "The Motor Fuel Consumption Model, Eleventh Periodic Report," Energy and Environmental Analysis, Inc., November 7, 1984.
10. "Motor Vehicle MPG and Market Shares Report" Oak Ridge National Laboratory, U.S. DOE, February 1984.
11. "The Highway Fuel Consumption Model, Tenth Quarterly Report," Energy and Evironmental Analysis, Inc., November 1983.
12. "Revised Projections of Fuel Economy and Technology for Highway Vehicles, Final Report," Energy and Environmental Analysis, Inc., June 15, 1983.
13. "Consumer Expectations for Future Gasoline Prices," Energy and Environmental Analysis, Inc., May 1983.

Senator **JOHNSTON**. The following is an excerpt from the Harvard Business School research project report on the auto industry in the

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[1] Due to the voluminous nature of the material submitted they have been retained in subcommittee files.

American economy, and I'd like to read it to you—it is one paragraph—and see if you agree with it.

> With the possible exception of GM's Saturn program, most of the big three's new product investment is committed to midsized, large, luxury, sporty cars. Meanwhile, the Japanese are blanketing the small and midsized car markets with an increasing number of models. From 1980 to 1985, Japanese and Korean automakers introduced seven times as many small cars and three times as many midsized cars as U.S. producers.
>
> New product announcements for the 1986–1990 period show Japan with four times as many new cars planned. This analysis demonstrates that, if the current pattern of new product introduction continues, U.S. automakers will either abandon or be forced to abandon most of the nation's small car manufacturing capacity by 1990 in a free trade environment.
>
> Only Federal CAFE regulations, which forbid U.S. automakers from counting new vehicles with less than 75 percent local manufacturing content in their corporate fuel economy averages, will keep the U.S. automakers from totally abandoning the domestic production of small cars. This scenario, based on conservative assumptions, poses great risk for the big three and the Nation as a whole.

And my question is, first, do you agree with that analysis?

Mr. SILVEY. Senator, I'm not an expert on that. I believe Ms. Steed has people that have looked into that area.

Senator JOHNSTON. Do you agree with that, Ms. Steed?

Ms. STEED. Not entirely. I don't believe that only CAFE will keep the pressure on the manufacturers to offer a full range of consumer choices, including the small models.

Senator JOHNSTON. Do you agree with their conclusion that it would be disastrous for the American automobile industry, if they did abandon the small car?

Ms. STEED. I don't believe that they will do so. From a competitive standpoint, they are committed to offering a full range of choices to meet consumer demand of all types.

Senator JOHNSTON. Has your analysis relied upon—well, of course you haven't completed your analysis and you can't tell us, and I appreciate that. So I won't ask you. That's why I asked Mr. Silvey.

I must say I am troubled. I want to give to NHTSA and to our regulators the authority to make good judgment on these things, and I wanted you to have that judgment and to get something other than just the same old free market, free market's going to handle everything, don't worry, everything is OK.

We have heard that before and it does not work, and we want to be—you know, it may well be that the free market, which I believe in, but not to the exclusion of the facts—I just wish we'd get a better judgment out of the administration. I must say it concerns me considerably that we would just say, everything's going to be OK.

I've seen what EIA says in terms of domestic oil production. It says it is going to drop lke a rock. From the worst case scenario in the Energy Information Administration, it goes from a domestic production of 11.9 million barrels per day to 7.6 million barrels per day in 10 years. That's domestic production.

Imports, up from 5.06 to 11.74 billion barrels per day. And, yet, we're told that the free market is going to handle domestic crude and imports. I think it is going to be just the opposite, and that's not the fault of the free market. That's just the fault of the fact that we are running out.

Well, I hope we will hear from other witnesses a balanced view of why we ought to give the authority to relax these standards.

Thank you, Mr. Chairman.

Senator NICKLES. Thank you, Senator Johnston.

Senator Bumpers.

Senator BUMPERS. Mr. Silvey, let me ask you this. Does the Department of Energy have any energy conservation policy other than just allowing the free market to dictate conservation?

Mr. SILVEY. Senator, it has been our experience and our analysis of the data over the past 10 to 15 years that whenever the Government has interfered with the economics of energy markets it has had a negative effect on conservation.

Senator BUMPERS. My question now, Mr. Silvey, is not what your impression is. Does DOE have a policy other than allowing the free market to dictate conservation in this country?

Mr. SILVEY. That is the basic policy, treating conservation as an energy resource, as oil or gas or any other energy resource.

Senator BUMPERS. Do you think that imports would be down as significantly as they are right now, and do you think that OPEC would still be in a shambles, if we had not imposed a mandatory conservation policy in this country?

Mr. SILVEY. Senator, I believe that the reason imports are down the way they are now is because we removed the price and allocation controls on oil. And I'm not certain what you mean by the "mandatory conservation policy."

Senator BUMPERS. The mandatory conservation policy I'm talking about is the Energy Policy and Conservation Act we passed in 1975 that mandated a fleet average for automobiles.

Mr. SILVEY. Senator, I think that if you just look at the data on how much the corporations, the automobile manufacturers, exceeded those standards when the market dictated that—1979, 1980, 1981, 1982—it shows the power of the market. And I don't believe that's the power of the standards.

Senator BUMPERS. In other words, you think we'd be just as well off today if we had never passed the CAFE standards?

Mr. SILVEY. About so, Senator, yes, sir. I cannot give a great deal of credit for where we are today in fuel economy to the standards.

Senator BUMPERS. Well, why do you think the automobile industry complained so loudly when we passed that law in 1975? Why do you think the manufacturers were so adamantly opposed to it?

Mr. SILVEY. I think it was very clear at that time, Senator, that we were under price and allocation controls, we were artificially holding the price of oil down. Nobody was getting the correct market signals on the value of fuel economy in the marketplace.

Senator BUMPERS. The marketplace can be pretty fickle. Here's an ad that General Motors ran in The Washington Post in November 1979. It said: "Today we believe the marketplace is demanding cars that, based on a fleet average, will be even more fuel efficient than those required by the Government."

That's what GM believed in 1979, but it doesn't believe that today. So the marketplace can be fickle, can't it?

Mr. SILVEY. Yes, sir. And once you take the economic controls out of it, then the consumer in our view makes the best decision.

Senator BUMPERS. What if the marketplace guesses wrong?

Mr. **Silvey**. Then those that made choices will suffer.

Senator **Bumpers**. I agree with that.

In 1975 the average car in this country used 104 gallons of gasoline per year. Today that average is 84.4 gallons. That is a reduction of 20 gallons per automobile. And you think that reduction was caused by the free market, and not the CAFE standards?

Mr. **Silvey**. That's correct, Senator.

Senator **Bumpers**. In 1975 the national fleet average of all gasoline-powered vehicles was 13.53 miles per gallon. And even in this 10-year period since EPCA was passed, that average is only up to 16.70. This is sort of an indictment of the fact that we probably haven't gone as far as we should.

Now, that will come as a shock to a lot of people who very seldom see anything less than 25 miles per gallon average on the sticker in the windows of automobiles. But the truth is that the national average right now is 16.70 miles per gallon.

Mr. **Silvey**. Our data shows it's about 17.5, but it's a fleet average for ages of automobiles as much as 10 and 11 years old.

Senator **Bumpers**. I think you're probably right. This is a 1983 figure; 1985 probably is 17 or more.

But to go back to Senator Johnston's line of questioning regarding our import reduction—and incidentally, that has put OPEC in a shambles while the consumers of this country have actually benefited from a dramatic reduction in oil prices—I happen to disagree with you. I think the CAFE standards were very instrumental in reducing oil imports.

I think OPEC strongly underestimated the willingness and the ability of the countries of Western Europe and the United States to conserve fuel, and I think that's the reason for it.

Mr. **Silvey**. I agree with you, sir.

Senator **Bumpers**. See now, I come down on a different place than you do. I think the CAFE standards reduced imports, and I think the American consumer has benefited from it. But if we do what you say and what Ms. Steed advocates, and that is just to let the free marketplace determine our policy—to use your own Energy Department statistics, domestic production is going to be down by four million barrels a day and imports are obviously going to be up. Do we not have a national security interest in not being that dependent on imports?

Mr. **Silvey**. Sir?

Senator **Bumpers**. Can we let the free market decide our national security?

Mr. **Silvey**. Sir, we are in a much better position today, with the appropriate price signals coming to consumers—both in the case of an oil supply disruption, there are a number of factors that will affect the lowering of prices in an oil supply disruption, and I just don't believe that fuel economy standards are even in the same order of magnitude as such things as the strategic petroleum reserve and allowing prices to initially go up. They just aren't in the same order of magnitude.

Senator **Bumpers**. You're at odds with the President then on that, because he doesn't believe in the strategic petroleum reserve either.

Mr. **Silvey**. That's not correct, Senator. He does believe in it. We will by the end of the fiscal year have 489 million barrels in storage. We can pump oil at 2.3 million barrels a day. It will take a sizable disruption for us not to be able to put oil back into the market.

We are currently sitting on 10 to 12 million barrels a day of excess production capacity in the world.

Senator **Bumpers**. That's the subject of another hearing.

But let me ask you one other thing. Do you believe that people ought to comply with the law once it's passed?

Mr. **Silvey**. Absolutely, Senator.

Senator **Bumpers**. Well, how do you feel about General Motors and Ford failing to comply with the law and then coming back to Congress betting that they can get some relief from the law?

Mr. **Silvey**. It's my understanding, Senator—and I'll have to defer to Ms. Steed for the specifics, that the law offers them the opportunity to appeal and gives Ms. Steed some latitude.

Senator **Bumpers**. I know that, and I also know Ms. Steed's attitude about this and what the decision's going to be. [Laughter.]

Ms. **Steed**. Yes, it does give us some latitude, and I think we have to take into consideration a number of factors that have occurred and changes that have occurred since the time the companies made some of the initial decisions. For example, economic conditions have changed.

The law contemplated some of those fluctuations, and allowed the companies a mechanism for dealing with that without coming into unlawful conduct as defined by the act.

Senator **Bumpers**. Let me ask you this. I don't want to take sides in this yet, and I might be willing to compromise on this issue. But do you think it's fair for the Chrysler Corp. to comply and General Motors and Ford not be required to comply? You think that is competitively fair to the Chrysler Corp.?

Ms. **Steed** The Chrysler Corp. is a slightly different type of company from GM and Ford, in that it is not a full line manufacturer.

Senator **Bumpers**. Well, Chrysler doesn't think it is a different type of company. Chrysler doesn't like this at all.

Ms. **Steed**. I understand that. We've heard from them, very loudly.

Senator **Bumpers**. Does the fact that you think Chrysler is a different type of company give you the prerogative of putting it at a competitive disadvantage?

Ms. **Steed**. Well, one of the factors that we have to look at is the economic situation and the economic effects of the standards. That's something that we will be considering in our analysis, although I wouldn't define it as fairness necessarily.

Senator **Bumpers**. That answers all my questions, Mr. Chairman.

Senator **Nickles**. Thank you, Senator Bumpers.

Senator Rockefeller.

Senator **Rockefeller**. Thank you, Mr. Chairman.

I, as Dale Bumpers points out to me about once a day, I've only been here 4 months and barely have a right to think. But I did come to this hearing with the idea of trying to, and do come to this hearing, with the idea of trying to make up my mind as to what's the best thing to do about the situations.

It's one of those things where an automobile logic says that Chrysler is right and the other two auto companies are wrong. And then you start to look at the facts, at least as you would like to learn them, and then you choose to make the matter more complicated. And thus, when you come to a hearing, and having prepared for it with an open mind, that puts a lot of pressure upon those who give us testimony.

And I was looking forward to learning something from you both, and I have not. What I have received, as has been pointed out, is an extraordinary commitment to an ideology, particularly from you, Mr. Silvey, which seems to transcend the facts at hand or the decision that has to be made by Ms. Steed.

And I find that deeply troubling. There is not the room for error. There is not the margin for misjudgment ever in the part of the country where I come from, where unemployment is still at 16 percent. When you say to me that our basic approach to both resources, supply and conservation, is the same, a market-oriented energy policy, then I become nervous on behalf of West Virginians.

For example, after the OPEC oil crisis the coal industry, based upon free market instincts, enormously overexpanded based upon a miscalculation of a substantially higher demand for coal than could ever be realized. They overbuilt, overproduced. And then when the world grew somewhat more rational, thousands of coal miners were thrown out of work.

Now, if you are telling me that we must minimize Federal control and involvement in energy markets, while maintaining public health and safety and environmental quality—and I don't know what your commitment is to that, but it certainly is the proper end of a sentence that begins the way you began that one—what should minimum Government involvement be in the matter of energy?

Mr. **Silvey**. Senator, in energy markets, every time the Federal Government has put its fingers into economic regulation we found that we just can't respond in the same way that millions of decisions being made on a daily basis by consumers can respond, and the markets don't work that way when you have regulators.

At the time that the coal industry expanded, using your own example, we were under price and allocation controls on oil. The correct market signals were not getting through to people as to what the price of oil should be. There was a world price in 1974 of $12 a barrel and we had by using price controls averaged that out at the refinery at $7 a barrel for U.S. consumers.

We found ourselves in a position of subsidizing imports. Imports grew by almost 3 million barrels a day from 1973 to 1978, when they peaked. It's—this had to have a negative effect on any industry that was involved.

Senator **Rockefeller**. But in a parallel fashion, it has been the case and I believe still is that research moneys in your Department for nuclear power, which of course is competitive to coal and which has been rejected by the free market for so long that it's been a long time since anybody can remember obtaining a permit to build a nuclear powerplant. Yet research and development money in your Department on nuclear power continues at a much higher level than it does for coal.

For example, the Clean Coal Reserve of $750 million which was separated out and presumably is under the jurisdiction of DOE, the President recommended zero for that. But there's a lot of money for nuclear power research, but nuclear power is the one thing that the free market is rejecting.

Is the President wrong?

Mr. **Silvey**. Senator, the money that's in nuclear power is for technology development. It is not money that is in for the current generation of nuclear power plants. As far as the spread of the budget on coal and on nuclear, I really am not an expert on exactly which technologies are being funded and which are not and for what reason.

But the policy of the Department is to fund long-range research and development for the most part, getting away from near-term types of investments that are very high dollar, where the private sector, if the technology is there, ought to be picking it up.

Senator **Rockefeller**. You mean something like synthetic fuels, for example?

Mr. **Silvey**. Synthetic fuels, the kinds of technologies—there are synthetic fuel technologies in the marketplace today, and there is research going on in some of the advanced technologies, Senator. But again, I'm out of my element.

Senator **Rockefeller**. With respect to the free market—and again, this dominates my thinking, simply because I have to sort of get through this heavy ideological factor you express to try to get at what your point of view is on it, other than the fact that you believe we should roll back the mileage requirement—you said from your personal point of view that it would be better if there was literal and absolute free trade, and that if Japanese cars came into this country at an unstoppable rate, being preferred by consumers or for whatever reason, that because the free market would have dictated that event you would favor it, regardless of the cost to this nation's economy?

Mr. **Silvey**. I think you put a number of words in my mouth, Senator. But I did say, yes, that I favored free trade, and in that way you get the best competition, you get the best prices for consumers all the way around.

I did not, I believe, make the comments about unstoppable rates, and I would have to cut off at any implication of dumping or anything like that, which there are laws to handle under the Department of Commerce.

Senator **Rockefeller**. What was your work before you came to the Department of Energy?

Mr. **Silvey**. I was an analyst for the Department of Defense.

Senator **Rockefeller**. For the Department of Defense? I do not have any further questions. I may have further questions, Mr. Chairman, but I will submit them in writing.

Senator **Nickles**. Senator Rockefeller, we appreciate your comments.

Some of the Senators were not aware of it, but I asked for a 5-minute time limit. Senator Metzenbaum was courteous enough to follow that.

Senator, you said you had additional questions?

Senator **Metzenbaum**. I do. Thank you, Mr. Chairman. Mr. Chairman, before I proceed, however, it's my understanding that Mr. Iacocca is going to be testifying at a hearing of the Commerce Committee on this same issue. I had hoped that he might be with us. Is that wrong?

I was going to suggest we have a joint hearing with the Commerce Committee if he was coming, but if he's not coming I don't think we ought to have the joint meeting. [Laughter.]

I had one more question for you, Mr. Silvey. As I understand your position, I think you're saying that if market forces demand only 13 miles-per-gallon cars that it's in our national interest to permit that to occur, regardless of the impact on energy consumption and what impact it might have as to our vulnerability in the event of a shortage.

Am I correct in understanding your position?

Mr. **Silvey**. A certain rigidity in ideology is being ascribed that I don't think is warranted, Senator. I did not say anything about 13 miles-per-gallon cars.

Senator **Metzenbaum**. I understand that. But to make the point, even if it's 20 or 15 or 18, whatever.

Mr. **Silvey**. What I've said is that the market has brought great fuel economy into the product lines and we have saved a million barrels a day in the fuel economy that the market has brought.

Senator **Metzenbaum**. You don't think CAFE had anything to do with it?

Mr. **Silvey**. I think personally that the CAFE standards had an effect in positioning the industry, but I think the doubling in oil price that took place in the Iranian revolution had the majority of the effect by far.

Senator **Metzenbaum**. If you were to advise this committee, you'd think that we ought to repeal CAFE requirements?

Mr. **Silvey**. I don't think the Department of Energy has a position on that, sir.

Senator **Metzenbaum**. What about your personal position? Because it follows if you think market——

Mr. **Silvey**. My personal view is that within a couple of years that it will be irrelevant, because at the point where I feel the industry is by 1987, I think they will all be above 27.5.

Senator **Metzenbaum**. And then after that?

Mr. **Silvey**. I think they will continue to go up.

Senator **Metzenbaum**. Ms. Steed, first let me ask you. There seems to be a feeling that the Department's position is pretty well made up on this subject, and that the Department's position pretty well supports the Ford-General Motors position.

Can you tell us, what are the facts?

Ms. **Steed**. Actually, we have not made up our mind, and I would not be here sitting before you if I didn't believe I was an objective regulator who would take into account all of the facts. And it is a very complex situation and a very complex statute that requires a great deal of balancing on our part to consider all of the factors that Congress gave us to consider.

So we have not yet made up our mind. We are analyzing all of the economic effects, the technological effects, and the need to conserve energy before we make a final decision in this matter.

Senator **Metzenbaum**. Have there been any indications or have you given any indications, you personally or the Department is leaning towards relaxing the standards?

Ms. **Steed**. It would be inappropriate for me to comment, Senator, at this point since we are in rulemaking.

Senator **Metzenbaum**. Now, as I understand it, Ms. Steed, if the manufacturers don't meet the CAFE standards in a particular year and they have no credits from previous years, they can apply the credits they project they will earn in future years in order to avoid fines. Is that correct?

Ms. **Steed**. That is correct. That is permitted by statute up to 3 years to carry back credits.

Senator **Metzenbaum**. And those projections must be approved by NHTSA?

Ms. **Steed**. That is correct.

Senator **Metzenbaum**. Now, it's my understanding that in May of 1984 Ford submitted a compliance plan to NHTSA which projected that it will earn considerable credits by exceeding the CAFE standards in model year 1986, and NHTSA approved that scenario in July 1984. Is that correct?

Ms. **Steed**. Yes, sir, it is.

Senator **Metzenbaum**. And didn't Ford claim it would earn more than $25 million in credits in 1986?

Ms. **Steed**. Barry, do you remember the number?

Mr. **Felrice**. That's probably the right number, yes.

Senator **Metzenbaum**. How does that translate into overall fuel efficiency, if in July of 1984 you approved a scenario where they said that in 1986 they would earn sufficient credits in future years to cover their 1984 production, and in fact they said they'd earn more than 25 million credits in 1986?

Now, that indicated that they were going to exceed the standards, isn't that correct?

Mr. **Felrice**. Senator, two things have happened since then. One, Ford filed a plan to earn carryback credits to offset a shortfall for model year 1985.

Senator **Metzenbaum**. Say it again?

Mr. **Felrice**. Ford filed a second plan in December of 1984, in which they estimated they would earn carryback credits to offset the 1985 standard shortfall. In that plan they amended the plan that they submitted to us in May of 1984 and they said two things:

One, they said that they would no longer need carryback credits for model year 1984, so their first plan was moot. They figured they would have sufficient carryforward credits to offset any penalties, so they no longer needed to exceed the standard in model year 1986.

Second, they drastically changed their projection in terms of CAFE for model year 1986. It was much lower than they had estimated 6 months earlier.

Senator **Metzenbaum**. So that they were saying that in the 1986 model year they were going to earn 25 million credits. Then in December 1984 they supplied a compliance plan for model year 1985 which also projected credits from exceeding the efficiency standards in future years, is that correct?

Mr. **Felrice**. That's correct, but not necessarily model year 1986.

Senator Metzenbaum. Then 3 months later, in March 1985, Ford petitioned NHTSA to roll back the fuel efficiency standards on the grounds that the 27.5 miles per gallon limit was technically and economically impractical, is that correct?

Ms. Steed. That's correct.

Senator Metzenbaum. Doesn't all this seem a little contradictory to you? First they're claiming in May and December that they're going to pick up future credits in 1986. Then 3 months later they come in and they ask you to reduce the efficiency standards for the model year 1986.

How do you reconcile this change within a 3-month period? Automobile manufacturers don't change their total lines or their operating procedures within a 3-month period. What does it say to you and what did you ask about it?

Mr. Felrice. Well, Senator, they didn't necessarily say that they would earn credits in model year 1985 in their December submission. The details of when they would earn credits are under a claim of confidentiality, so I can't answer in which model years they would earn such credits. But their projection for model year 1986 in the December document was much lower than it was earlier.

Senator Metzenbaum. But in May 1984 they had said that in 1986 they would pick up 25 million credits, right? In May 1984 they did that?

Mr. Felrice. I'm not sure of the exact number, but they did say they would earn credits.

Senator Metzenbaum. And now we come down to December. You're saying to me you can't indicate what they did say, but it was something less as to the number of credits they'd earn in 1986, is that right?

Mr. Felrice. Correct.

Senator Metzenbaum. Now I'm asking you, how do you reconcile the fact that 3 months later they come along and they say you have to change the standards from 27.5 to 26, whereas 3 months ago and about 6 or 9 months ago we were telling you we were going to have a surplus, we were going to earn credits, carryback credits?

How do you reconcile that total change, and what did they say and what did you say?

Mr. Felrice. That is one of the things that we are looking at, why did the numbers change so much since a year ago? And they've changed frequently even since then. That's one of the things we're asking both Ford and GM: Why have your prior estimates changed and what are the reasons for those changes?

Senator Metzenbaum. In December 1984 they sent you this letter, to Ms. Diane Steed: "Compliance for our 1985 import fleet will be achieved through the use of carryforward credits from the 1982–84 model years and carryback credits from the 1986–88 period."

Now, what I don't understand is how you wouldn't actually be summarily dismissing their petition on the basis that a company as large as Ford would come in and reverse their position 100 percent, a total reversal. First they say: "We're going to have carryback credits from the 1986 model." Now they say, "We need a reduction of 1.5 miles per gallon in order to be able to comply in 1986."

Somewhere something's missing, and you're not telling us what they told you or why that total change. It certainly raises questions.

Ms. Steed?

Ms. **Steed**. If I might, Senator, one of the things that the auto companies do under CAFE is to constantly monitor what they believe they are going to achieve, and that depends to some degree or to a great degree on consumer demand and a number of other factors that are beyond the specific control of the auto company.

Senator **Metzenbaum**. What they're going to achieve relates to consumer demand?

Ms. **Steed**. Yes, it does. If consumers, for example, want to buy larger cars that have lesser fuel economy, that will affect the company's overall corporate average fuel economy.

One of the things it's incumbent upon us as an agency to do is to take those figures and analyze them to see whether or not the company has adjusted its projections, whether it is likely that they will meet those projections, and to compare what they told us the last time that they filed a plan. And that's exactly what we're doing in this rulemaking process.

Senator **Metzenbaum**. Do you take into account the fact that, in changing their standards, they may be spending hundreds of thousands, maybe millions of dollars, on almost full-page newspaper ads urging people to buy bigger cars? And is that an effort to comply or is that an effort to just make more money?

Ms. **Steed**. We take into account their marketing strategies and what they've done. For example, I think if you look back, they had dealer incentives and financing for smaller cars. They've held prices down on smaller cars.

All of those things we do take into consideration as we look at their plans.

Senator **Metzenbaum**. Thank you, Mr. Chairman.

Senator **Nickles**. Thank you, Senator Metzenbaum.

Senator Johnston.

Senator **Johnston**. Just a short comment, Mr. Chairman, and that is I've been as much of a free marketeer on this committee as I guess you can get in terms of deregulation of crude and natural gas. But you know, there's a limit to anything.

We had to put on prorationing, unitization, conservation laws on energy because the free market didn't send the right signals and they produced our oil wells too fast back in the old days. We put on a depletion allowance and the expensing of intangibles because we thought a domestic oil and gas industry was important.

Now, there are some in the administration that want to repeal that, too. I wish you'd speak to them and tell them that some regulation is good. I don't want to do away with electric rate regulation. I don't want to do away with natural gas rate regulation of natural gas companies. I mean, you know, you've got to regulate some of these monopolies.

I wish I had a little more confidence in the fact that the administration is making these balanced views that you talk about, Ms. Steed. You say all the right things and I hope that's what's being done, and if that's so then I will strongly support your right to make those regulations. But I don't want somebody there who's just saying, if it's Government, it's a regulation, throw it out, because if that's so we're going to ruin our oil and gas business in my State and in the rest of the country and rely on OPEC, because the market is signaling now to rely on OPEC, don't worry about a domestic oil and gas business.

By the way, the market is also signaling, go to Japan and buy your cars. I don't want to do that either. We've got a great General Motors plant in my home town and I want to keep it.

Senator NICKLES. Thank you, Senator Johnston.

One quick followup question. I appreciate the panelists' patience and we have two additional panels, but I think this is important, particularly for some of the Senators who came a little bit later. In your opinion, do the car companies have the option to pay the fine and continue to sell large cars, or must they comply with the mileage standards and not sell large cars?

Ms. STEED. They have that option, Senator, under the law. But I believe you ought to ask them that same question, because it is their view that it is not necessarily the fines that are the real problem.

They believe that to exceed the CAFE standards also puts them in an unlawful situation. I believe that causes them even a more severe problem than the sole fact of paying the fines.

Senator NICKLES. I understand that.

Also, in 1978 Congress enacted a gas guzzler tax, which in model year 1986 and beyond is as much as $3,850 per car for fuel inefficient cars. That's 12.5 miles per gallon or less. Regardless of what happens on the fuel economy standards rulemaking, doesn't that tax help encourage the sale of the smaller, more fuel-efficient cars?

Ms. STEED. I believe that tax will have some balancing effect; yes, sir.

Senator NICKLES. All right. I appreciate your comments.

Do you have any additional comments?

Senator BUMPERS. Just a couple, Mr. Chairman.

One observation, Mr. Silvey, on the strategic petroleum reserve. And I disagree with you on why the price on OPEC oil fell. But in any event, the strategic petroleum reserve at the end of this year would give us a 37-day supply in case of a serious interruption. In other words, 471 million barrels in the strategic petroleum reserve would maintain this country's total consumption for 37 days.

Now, getting back to the philosophical differences that we have here, let me ask both of you if you would recommend the repeal of the Energy Policy and Conservation Act of 1975.

Mr. SILVEY. Repeal of EPCA?

Senator BUMPERS. Yes. Would you recommend to the Congress that we repeal it?

Mr. SILVEY. No, Senator.

Senator BUMPERS. Why not?

Mr. SILVEY. There are a variety of laws or a variety of provisions under the law, and I simply would not recommend repealing all of it.

Senator BUMPERS. Well, what is in the statute that you like?

Mr. SILVEY. I would have to pull the statute out and go through it, Senator. But there are laws dealing with the——

Senator **Bumpers**. Well, every bit of it is contradictory to your free market philosophy, Mr. Silvey. I'm just wondering, where do you differentiate between what the free market should dictate and what it shouldn't?

Mr. **Silvey**. Senator, the question I was asked at this hearing was, do I believe that the corporate average fuel economy standards have had a major effect? And my answer to that is no. And I think I also commented that there's not a departmental position on repealing the CAFE standards at all.

In fact, my personal belief is that the 27.5 miles per gallon standard will be exceeded within a couple of years by all three major manufacturers.

Senator **Bumpers**. How do you think that's going to happen, when right now both Ford and General Motors are offering 8.8 percent interest rates on the biggest automobiles they sell?

Mr. **Silvey**. I think it will happen by, if I understand it correctly—Ms. Steed would know the specifics in more detail than I would. It would happen by what's already planned by those automakers.

Senator **Bumpers**. Don't you think a price element is involved in meeting these standards? Obviously, fuel prices required people to buy smaller automobiles when prices really began to increase dramatically. But don't you think marketing and profitability follow whatever the corporate decision is? Don't you think they are a big factor in what kind of cars the American people buy?

Mr. **Silvey**. I would like to ascribe to the American consumer substantially more ability to make choices, make informed choices, than that, Senator.

Senator **Bumpers**. Well, then, you're saying to General Motors and Ford that they're just wasting their money by advertising.

Mr. **Silvey**. I agree with Ms. Steed in her account, that she thinks it has had a modicum of effect or a medium amount of effect. But I don't believe that it has had the overwhelming effect that seems to be implied here.

Senator **Bumpers**. Did DOE comment in this hearing, Ms. Steed? Your docket's been closed on this case, has it not?

Ms. **Steed**. No, it has not.

Senator **Bumpers**. How much longer is it open?

Ms. **Steed**. DOE has commented and given us a lot of information on the energy situation.

Senator **Bumpers**. They have commented?

Ms. **Steed**. Yes, they have. In addition, they have a ten-day period during the rulemaking process in which they can comment on our position.

Senator **Bumpers**. Well, Mr. Chairman, I just want to say for the record that I came here this morning with a much more open mind than I have right now. I came prepared to talk about some possible compromise on this issue that would not be unduly burdensome to General Motors and Ford. I still want to be reasonable about it.

But I must say that the testimony of the two witnesses this morning has caused me some pause in my position on this.

Senator **Nickles**. Thank you, Senator Bumpers.

As regards Senator Metzenbaum's comments on Mr. Iacocca, we're going to try and see if we cannot get Roger Smith to attend Greenbriar next year and it may help your chances.

But we thank our panelists very much for their presentation today.

Did you have additional comments, Senator Rockefeller?

Senator **Rockefeller**. I have one comment. I would just like to second earnestly what Dale Bumpers just said. Here we're talking about three gigantic companies in direct conflict over this situation which defines itself fairly obviously. And yet, it is very complex because it does have to do with the delicate relationship between the public interest with respect to all kinds of things, and yet also with the economies of these major employers which are at the base of our economy.

But when I come to a hearing of this sort, I want to be enlightened by what I hear and I want to learn, and I don't want to be talked to as though I were in my 11th grade in high school about political science ideology.

The effect, just for your own information the next time you testify, the effect of what I have heard here and the way that it makes me feel about your instincts about regulation decisionmaking with respect to the free market pushes me much more onto Chrysler's side than onto Ford and General Motors' side.

And I'm not sure it's their fault. In other words, you have done them no service if in fact your position is going to end up with them.

Senator **Nickles**. Thank you, Senator Rockefeller.

And to our panelists again, we thank you for your presentation. We also ask that you be responsive to additional requests for additional questions. Thank you very much.

On our next panel, we have Dr. Marina Whitman, vice president, public affairs group, and chief economist for General Motors. We also have Ms. Helen Petrauskas, vice president, environmental and safety engineering, Ford Motor Co.; and Mr. Robert Miller, who is executive vice president for finance and administration for Chrysler Corp.

Dr. Whitman, please proceed.

STATEMENT OF DR. MARINA v.N. WHITMAN, VICE PRESIDENT, PUBLIC AFFAIRS GROUP AND CHIEF ECONOMIST, GENERAL MOTORS CORP.

Dr. **Whitman**. Thank you, Mr. Chairman. I am Marina Whitman, vice president in charge of the public affairs group and chief economist for General Motors Corp. I am pleased to have this opportunity to discuss our views on the corporate average fuel economy standards. And we ask permission to submit a more complete statement for the record.

Senator **Nickles**. I appreciate that.

Dr. **Whitman**. As the committee is aware, we have petitioned to reduce the 27.5 miles per gallon standard beginning in 1986, as permitted by law. Circumstances have changed since the Energy Policy and Conservation Act was enacted. Gasoline prices have not risen and supplies are plentiful.

Senator NICKLES. Dr. Whitman, if you would hold, I still cannot quite hear you. If all of our guests would please respect our witnesses.

And if you might pull the microphone up really close, that would help as well. Thank you very much.

Dr. WHITMAN. The result has been a resurgence in demand for family size cars. Unless the standard is lowered, full line manufacturers face the prospect of restricting product availability, which translates to plant closings, job losses, and lower economic growth. Fortunately, Congress foresaw the possibility of changed circumstances and gave the NHTSA authority to lower the standard to 26 miles per gallon. A copy of our petition has been provided to your subcommittee.

Since oil prices were decontrolled in 1981, non-OPEC supplies have increased by nearly 3 million barrels a day and the price of gasoline at service stations has dropped significantly. Most critically, gasoline prices have not come close to the $2 to $2.50 per gallon in 1985 anticipated by some experts just 4 years ago. In fact, inflation-adjusted retail fuel prices have dropped by about 25 percent since 1981, to about $1.18 per gallon in today's dollars.

Because of the resulting shift in consumer demand, auto manufacturers such as GM who produce a full line of cars are experiencing increasing difficulty in meeting the fuel economy standards. To avoid fuel economy penalties in 1983 and 1984, GM was able to draw on over a billion dollars in credits it had accumulated by virtue of having exceeded the standards in earlier years.

However, because of the 3-year limitation on carrying credits forward, over $400 million of the credits expired unused and no more remain. For 1985, therefore, GM is forced to rely on carrying back credits projected to be earned in future years to offset our current deficiency.

In the event that these contemplated carryback credits are not fully earned, the likelihood of which is increasing, GM should still be able to avoid noncompliance if its petition is granted. Without such action, we must anticipate the prospect of restricting production to increase GM's CAFE sufficiently to achieve compliance.

As the NHTSA has noted, under the law, failure to comply with the standards after applying credits constitutes "unlawful conduct." Accordingly, GM cannot and does not consider the payment of civil penalties to be a reasonable alternative for determining its long-term compliance strategies.

Our current difficulties are not the result of a failure to make product improvements. GM has maintained an ongoing commitment to fuel economy improvement since before the Arab oil embargo in 1973. As an example, our new large cars equipped with six cylinder engines have better fuel economy than the compact models with six cylinder engines that we built 10 years ago.

Thus, technology is not the issue in our CAFE situation. As we have emphasized previously, experience convinces us that fuel prices and perceived fuel availability are the most important determinants of our CAFE. Both are factors beyond our control.

The framework for analyzing the effects of retaining the standard must include not only changes in energy cost and availability, but also the major cost disadvantage and competitive problems plaguing the U.S. industry. Independent analysts agree that today the Japanese have a landed cost advantage in the United States for their subcompact cars of $2,000 or more.

We are making a major effort to narrow this cost advantage. Perhaps the most promising of the programs we have launched to improve our competitive position is GM's new Saturn Corp. We expect to achieve tremendous efficiencies in Saturn, including improved fuel efficiency in the product.

But our efforts could be slowed if we are forced to restrict vehicle production in order to achieve compliance with fuel economy standards. Any restriction in production would benefit certain foreign manufacturers who have historically specialized in subcompact and compact cars and who have accumulated a large bank of fuel economy credits. This would allow them to import more large cars to replace those we are unable, because of the regulation, to produce. In other words, we may suffer the perverse consequence of having to abandon a segment of the market in which we presently enjoy a competitive advantage and lay off the employees making the cars people want to buy, with very probably no significant improvement in the fuel economy of the U.S. fleet and the ability of foreigners to come in and make and sell those very cars that we would be restricted from making.

Fortunately, Congress recognized that conditions might change between 1975 and 1985, so it provided the Secretary of Transportation with the authority to reduce the standard from 27.5 miles per gallon for 1985 and later years to 26 miles per gallon.

The precedent for adjusting the standards was set in 1979, when the truck CAFE standards for 1981 were reduced in response to a petition by Chrysler, and again in the 1985 model year in response to a Ford petition. As a practical matter, the major goal of EPCA, to achieve substantial petroleum conservation, is being achieved. Adjusting the standard would facilitate a sensible reallocation of priorities that is fully consistent with the objectives of that law.

Thank you.

[The prepared statement of Dr. Whitman follows:]

Statement of

GENERAL MOTORS CORPORATION

Submitted to the

SENATE COMMITTEE ON ENERGY AND NATURAL RESOURCES

SUBCOMMITTEE ON ENERGY REGULATION AND CONSERVATION

Presented by

DR. MARINA v.N. WHITMAN

VICE PRESIDENT, PUBLIC AFFAIRS GROUP
CHIEF ECONOMIST

MAY 14, 1985
WASHINGTON, D.C.

Mr. Chairman, I am Dr. Marina v.N. Whitman, vice-president in charge of the Public Affairs Group and chief economist for General Motors Corporation. I am pleased to have this opportunity to discuss our views on the Corporate Average Fuel Economy (CAFE) standards.

As the Committee is aware, we have petitioned to reduce the 27.5 miles per gallon standard to 26.0 mpg beginning in 1986, as permitted by law. Circumstances have changed since the Energy Policy and Conservation Act (EPCA) was enacted. Gasoline prices are way below anticipated levels and supplies are plentiful. The result has been a resurgence in demand for family-size cars and better performing cars. Unless the standard is lowered, full-line manufacturers, to achieve compliance, face the prospect of restricting product availability, which translates into plant closings, job losses and lower economic growth.

In July of 1983, we appeared before Congress to discuss our progress in increasing the fuel economy of our products. We noted then that as a result of a number of technologically ambitious and expensive product programs, GM's fleet fuel economy average had more than doubled since 1974. We also reported that as a result of declining fuel prices GM faced the dilemma of having a fleet average fuel economy for 1983, 1984 and 1985 that might not meet the CAFE standards. Because of this possibility, GM asked Congress to remain very sensitive to changing market conditions and to consider whether additional forms of flexibility in the CAFE law should be enacted.

In July 1984, GM appeared before Congress and once again projected CAFE shortfalls as the result of a shift by our customers toward the purchase of more family-size cars and larger engines. This shift in consumer preference was the direct result of declining fuel prices and stable fuel supplies accompanied by a strong economic recovery. Nevertheless, by using credits available from prior and future years, and by extending 1984 model year production for some of our most fuel efficient cars, we stated that GM expected to meet the requirements of the law. This extension, however, placed those 1984 models at a price disadvantage against competitive models for which end of model year allowances had been paid to dealers.

Since our last Congressional testimony on fuel economy, it has become clear that the fuel economy standards are no longer consistent with the world energy situation. Nor do the standards fit today's competitive environment. There are also uncertainties about factors that are beyond a full-line manufacturer's ability to control that may prevent continuing compliance with the current standard. For these reasons GM petitioned the Secretary of Transportation to exercise her authority under EPCA by amending the CAFE standard to 26.0 mpg for 1986 and thereafter. A copy of our petition has been provided to the Subcommittee.

Energy Considerations

In the turmoil created by the OPEC embargo of October 1973, the U.S. imposed numerous controls relating to energy based on assumptions about petroleum availability and price that turned out to be wrong.

In 1975, OPEC produced approximately 50 percent of the world's crude oil versus only 32 percent currently. Of U.S. petroleum imports, only slightly over one-third is supplied by OPEC, a substantial reduction from a level of about 60 percent in 1975. Today, less than 3 percent of our oil supplies come from the Persian Gulf countries. The leading source of U.S. imports is Mexico, followed by Canada and the United Kingdom.

Furthermore, since oil prices were decontrolled in 1981, non-OPEC supplies have increased by nearly three million barrels per day and the price of gasoline at service stations has dropped significantly. Most critically, 1985 gasoline prices have not come close to the $2.00 - $2.50 per gallon in 1985 as anticipated by some experts just four years ago. In fact, inflation adjusted retail fuel prices have dropped about 25 percent since 1981. Also, the projected shortage of world oil supplies anticipated by many experts has not occurred.

The combination of ample petroleum supplies, which has been characterized as a glut, and gasoline prices approaching $1.00 per gallon have caused a strong resurgence in consumer demand for family-size cars and cars capable of pulling trailers. These kinds of cars have traditionally been popular with U.S. buyers for the utility, comfort and roominess they offer. Consequently, auto manufacturers such as General Motors who produce a full line of cars are experiencing increasing difficulty in meeting the fuel economy standards.

Failure to meet the CAFE standard in any particular year carries potentially heavy penalties. In 1983 and 1984 GM was able to draw from over $1 billion in credits it accumulated by virtue of having exceeded the standards in earlier years. However, because of the three-year limitation on carrying credits forward, GM no longer has available any credits from previous years, although over $400 million of the credits expired unused.

For 1985, therefore, GM is forced to rely on carrying back credits projected to be earned in future years to offset our current deficiency. Use of carryback credits to demonstrate compliance is permissible under the law. However, projections of credits to be earned are highly speculative because of their dependence on predictions of sales volumes and mix. These, in turn, depend upon predictions 3-5 years in advance regarding such factors as oil prices, general economic conditions, interest rates and the actions of competitors all factors beyond our control.

In the event these contemplated carryback credits are not fully earned, the likelihood of which is increasing, GM should still be able to avoid noncompliance if its petition is granted. Without such action GM must anticipate the prospect of restricting production to increase its CAFE to levels sufficient to achieve compliance.

As NHTSA has noted under EPCA, failure to comply with the standards after applying carry-forward and carry-back credits constitutes "unlawful conduct." Accordingly, GM cannot and does not consider the payment of civil penalties to be a reasonable alternative when determining its long-term compliance strategies. Thus, it may be necessary for us to restrict production of some of our best selling cars simply to improve our CAFE if it appears that we cannot otherwise comply.

Technology Considerations

It is important to note that our current difficulties are not the result of a failure to make product improvements. We have made many important advances and have established aggressive technological goals, which continue to challenge our engineers. Unquestionably, in our quest to continue to offer the American motorist a full line of vehicles that meet the CAFE standard, we have not always hit these aggressive technological goals and there have been slippages in our fuel economy estimates as we move from the drawing board to the production line. As a general observation, the statute is technology-forcing. As a consequence, it should be understood that some goals may not be fully achieved despite best efforts.

Further, the worst recession since the 1930s -- one that saw the industry suffer combined losses of over $4 billion in one year and peak auto-related lay offs of more than 650,000 people -- did force us to delay certain product programs.

Nevertheless, GM has maintained an on-going commitment to fuel economy improvements across the full range of its products since before the Arab oil embargo in 1973. From 1974-84, GM spent over $40 billion for new products, plants and equipment. We have made the necessary investment to provide the capacity to build a full-range of fuel-efficient cars. In fact, our new large cars equipped with six cylinder engines have better fuel economy than the compact models with six cylinder engines we built 10 years ago.

Yet despite our efforts and investments, we were forced in 1982 to close two assembly plants which had been fully converted to produce our new, highly fuel efficient compact and mid-size cars. The cost of these conversions was $130 million but the plants were closed because demand for those cars did not develop during this period of sharply declining gasoline prices. For the same reasons, an engine plant converted at a cost of about $300 million to make engines for small cars and trucks was idled last year for lack of consumer demand.

From a purely technological standpoint, we have implemented a number of major changes in our products that have contributed significantly to improved fuel economy. Outstanding among these are: vehicle weight reduction of about 1000 lb or 23 percent since 1974, V-8 engines, which once were installed in over 80 percent of our cars now account for only about 30 percent of installations, all of our automatic transmissions use technology to reduce slippage to improve fuel economy, acceleration capability -- a measure of vehicle performance -- has been reduced about 7 percent since 1977 to help improve fuel economy and we have made large improvements in reducing tire rolling resistance and in the aerodynamic characteristics of our cars. We also are developing the use of methanol which represents an excellent long-term energy source. In sum, we have vigorously exploited the technologies that can provide better fuel economy in our cars. The one major step we have not taken is to abandon selected segments of the market. GM still attempts to provide vehicles capable of meeting the full range of transportation demand. (See attachments.)

Technology is not the issue in our CAFE situation. General Motors builds and sells cars that get as much as 46 mpg on the highway. As we have emphasized in previous testimony prices and perceived fuel availability are the most important determinants of our CAFE. Both are factors beyond our control. As fuel prices increase or decrease, and consumer perceptions about fuel availability change, new car purchasing habits change. Today consumers are reacting rationally to lower gas prices by purchasing vehicles that satisfy their individual needs and wants.

Impact of Retaining the Standard

Reducing the standard from 27.5 mpg to 26.0 mpg will not have any significant impact on fuel consumption. For example, if the domestic new car fleet's average fuel economy was 26 mpg (vs. 27.5 mpg) and the fleet averaged 10,000 miles per year there would be an average increase in gasoline demand of about two tenths of one percent per year. To put that into perspective, U.S. refiners could meet that additional gasoline demand if they operated in effect for one or two additional minutes per day.

Even this estimate is overstated. By depriving consumers of some of the larger new cars they want and are willing to pay for, an excessively stringent standard will encourage the retention and continued operation of older, larger cars that meet their needs but are less efficient than today's largest cars. Also, if current full-line manufacturers are not permitted to supply the cars consumers want, then some consumers will simply buy what they want from another manufacturer which does not have CAFE problems (i.e.: foreign producers). In so doing, much, if not all, of the small savings just described will be eliminated. Alternatively, such forcing will induce other customers to switch from cars to light-duty trucks in order to obtain the carrying and towing capacity they need -- again reducing the energy savings.

Competitive Considerations

While the effect of lowering the standard on energy consumption will be de minimis, the effect on competition and employment, if the standard is not lowered will be significant. The framework for analyzing the effects of retaining the standard must include not only the energy price and availability changes previously noted but the major cost disadvantage plaguing the U.S. industry. There is wide agreement among independent analysts that today the Japanese have a landed cost advantage in the U.S. for their subcompact model cars of $2,000 or more.

We are making a major effort to narrow this cost advantage. Perhaps the most notable and certainly the most promising of programs we have launched to improve our competitiveness is GM's new Saturn Corporation. We expect to achieve tremendous efficiencies in Saturn, including improved fuel efficiency in the product. We'll achieve these efficiencies through the use of leading-edge technologies and new business and management systems so advanced that they don't exist together anywhere in the world today.

However, these programs will not be fully in place for some years. During the interim this cost disadvantage prevents us from effectively using price incentives to shift demand to domestically built small cars because any price decrease can be matched readily by Japanese competitors with much lower costs.

But our efforts could be slowed if we are placed in a position of having to restrict vehicle production in order to achieve compliance with the fuel economy standards. Such a restriction, occurring as it would among some of our best selling cars could result in substantial reductions in employment.

Furthermore, any restriction of production would benefit certain foreign manufacturers who have historically specialized in subcompact and compact cars and who have accumulated a large bank of fuel economy credits which would allow them to manufacture and import larger cars to meet the demand of that segment of the market. In other words, we may suffer the perverse consequence of having to virtually abandon a segment of the market in which we presently enjoy a competitive advantage and laying off the employes making the cars people want to buy. In addition, as just discussed, there would probably not be any increase in fuel conservation as consumers merely shifted purchases or retained their older, less-fuel efficient vehicles. Moreover, any restriction of production would increase auto prices while limiting consumer choice. Finally, the automotive trade balance would be adversely affected.

Resolving the Problem

Fortunately, Congress recognized that conditions might change between 1975 and 1985, so it provided the Secretary of Transportation with the authority to reduce the standard from 27.5 mpg, for 1985 and later years, to 26.0 mpg.

While there are those who argue that granting a reduction in passenger car fuel economy standards would set a precedent, that is not the case. In fact, the precedent was set in 1979 when the truck CAFE standards for 1981 were reduced in response to a petition by Chrysler. Again in 1983, Ford petitioned for a reduction of the truck standards which the DOT granted for the 1985 model year.

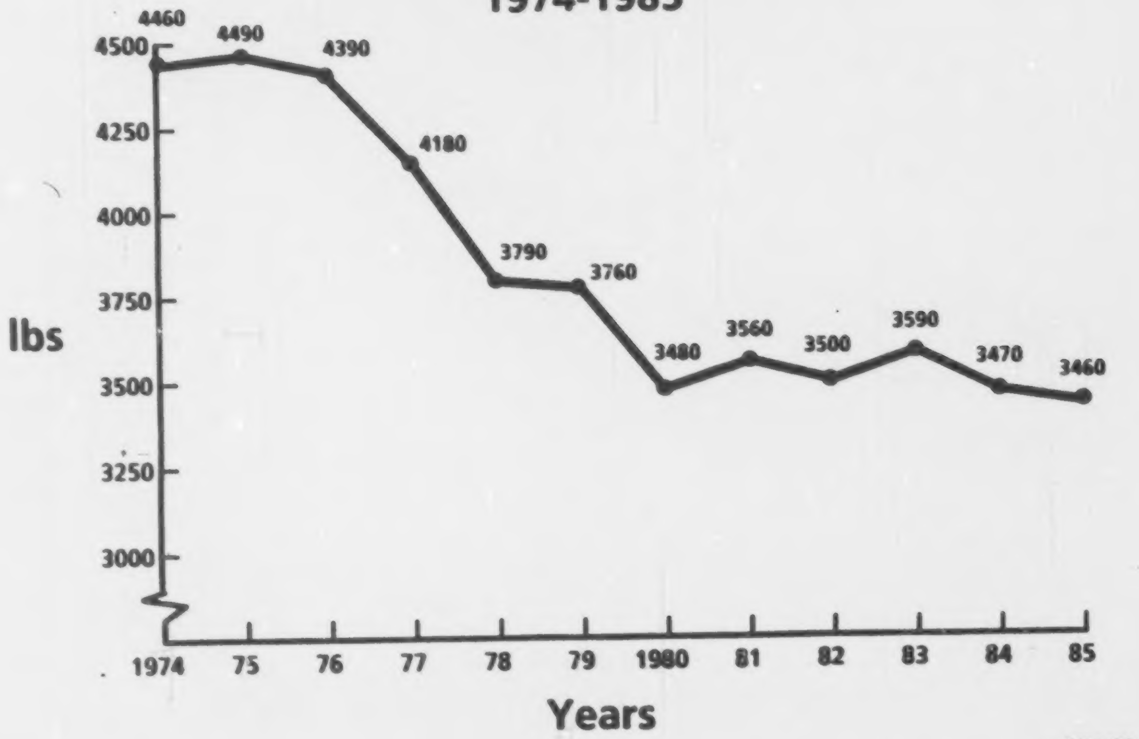
We believe that Congress did not intend to force domestic full-line manufacturers to take compliance measures that would lead to potentially serious economic upheavals, including layoffs, or significantly impede consumer choice.

As a practical matter the major goal of EPCA, to achieve substantial petroleum conservation, is being achieved. The goal would not be advanced, in our view, by continuation of excessively stringent CAFE standards. Adjusting the standard as we recommend would facilitate a sensible reallocation of priorities that is fully consistent with the objectives of EPCA and in tune with the economic and technical realities of 1985.

Requiring full-line domestic auto manufacturers to comply with excessively stringent fuel economy standards is sometimes justified as keeping "their feet to the fire." Unfortunately, to the extent that such standards do not reflect energy market trends, they deny consumers the kind of performance and comfort that they want and are willing to pay for and transfer American jobs abroad. The ultimate losers from such a policy are American consumers, workers and taxpayers.

GM Production Fleet Average Test Weight

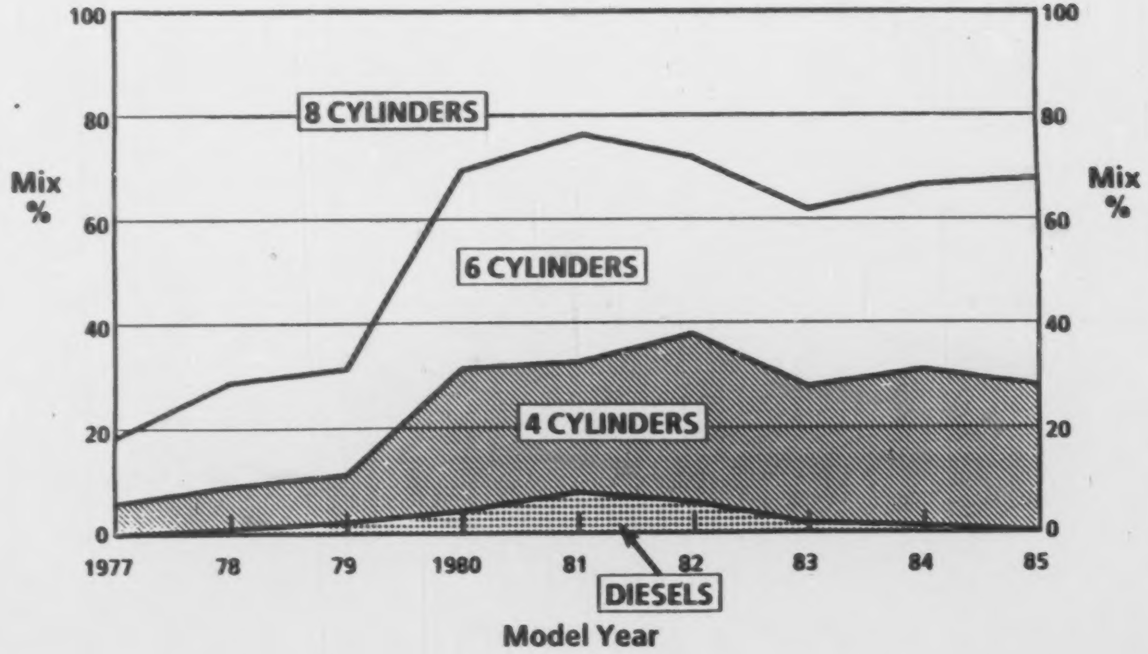
1974-1985



3/11/85

GM Production Engine Mix

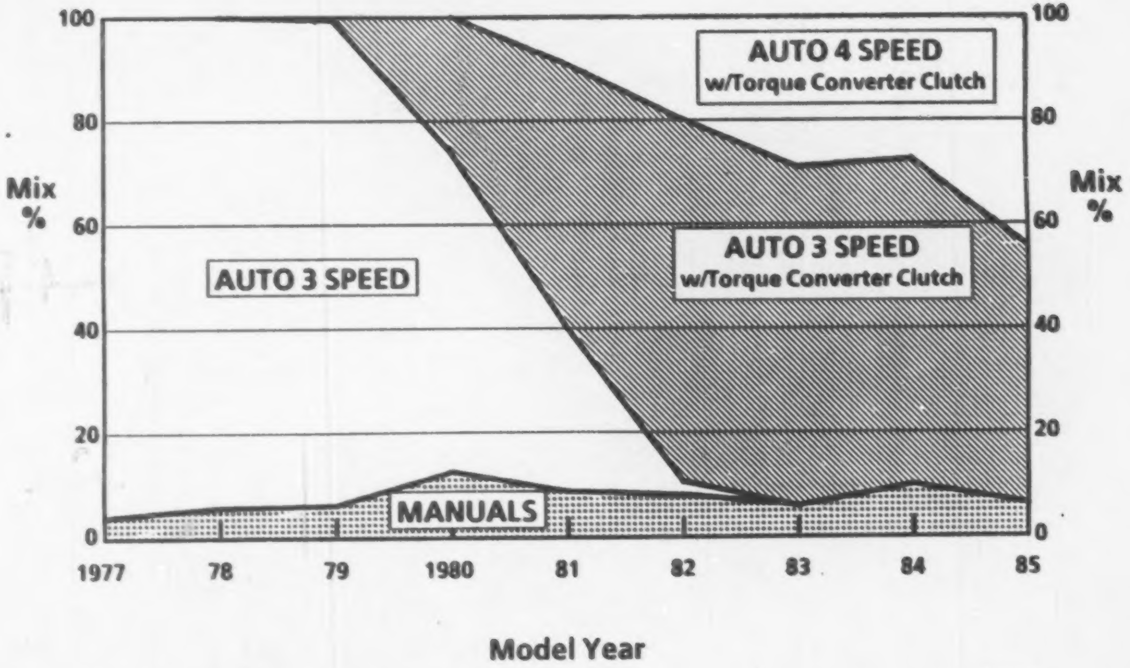
1977 - 1985



3/11/85

GM Production Transmission Mix

1977 - 1985



Torque converters improve fuel economy by reducing slippage.

3/11/85

Mr. NICKLES. Dr. Whitman, thank you very much.
Ms. Petrauskas.

STATEMENT OF HELEN O. PETRAUSKAS, VICE PRESIDENT, ENVIRONMENTAL AND SAFETY ENGINEERING, FORD MOTOR CO.

Ms. PETRAUSKAS. Thank you very much, Mr. Chairman. We appreciate the opportunity to discuss the status of Ford's program to improve the fuel economy of its products.

From 1975 through 1985, Ford will have spent more than $14 billion to revamp its entire U.S. product lineup. We have met or exceeded expected technical improvements. Since 1977, the weight of the average car is down by 1,100 pounds, and that, I might add, is greater than what the Government projected we would take out of the car. Average engine displacement is down about 40 percent. We have doubled the mileage of our small cars, and our largest cars today have mileages equal to the smallest cars we produced in 1975.

But, as you have heard, technical achievements alone do not assure that a manufacturer's production will be in compliance with the CAFE requirements. Compliance must also be based on forecasts of what size and type of cars consumers will purchase, which in turn is based on forecasts of fuel prices and availability and economic conditions.

In the early 1980's, a combination of forces—rising fuel prices, concerns about fuel availability, and the economic recession—sharply increased the demand for small cars at the expense of large car sales. As a result, Ford's CAFE performance exceeded the standard for this period.

But gasoline prices declined in contrast to the predicted escalation to the $2.00- to $2.50-per-gallon level. And when diesel fuel prices rose to exceed gasoline prices, the demand for diesel engines plummeted from an estimated 15 to 20 percent of our product line to less than 1 percent today. These factors have caused consumer preferences to shift toward larger cars and engines.

Ford would meet the standard today, except for this recent shift in consumer demand. The mileage standard needs to be evaluated in terms of today's economic and market conditions, not on projections that were made as to what they might be. Ford's present CAFE would be some 2 miles per gallon higher than presently projected, thus exceeding the standard.

Congress recognized that predictions over a 10-year horizon are uncertain and gave NHTSA the authority to reset the standard at 26 if necessary. We have asked NHTSA to review the facts according to the stringent criteria that Congress established.

Ford is, of course, concerned about energy. The future of the automobile business depends upon assured availability. We recognize that in the longer term gasoline prices are almost certain to increase, and we are painfully aware of the possibility of abrupt interruption of petroleum supplies.

For this reason, Ford has been a leader in developing alternate fuel technology, so that we are prepared in the event alternate fuels become available and there is a market which can operate on these fuels. In terms of today's cars, we have designed them to accommodate a substitute in part of alcohol for petroleum, and we are committed to have capacity in place to produce the highest fuel economy cars that technology and economic realities will permit.

Resetting the standard will not detract from these efforts. Further, a 1986 standard of 26 miles per gallon would increase U.S. petroleum consumption by no more than six one-hundredths of 1 percent.

I'd like to share with you several key points that we feel are important relative to our petition. First, the fuel economy of Ford products is fully competitive with that of other domestic and foreign manufacturers. Ford has five products on the overall EPA top fuel economy list, and this is the list of top fuel economy products that includes both imported products and U.S.-produced products. I might add that each of our five entries is a car that is produced in the United States.

In terms of EPA's top 10 domestic list, we have 10 out of the 14 products on that list. Our diesel-powered Escort with fuel economy of 43 miles per gallon in the city and 52 miles per gallon on the highway is tops in its EPA class.

Second, paying fines is not an alternative for Ford Motor Co. There is no question in our mind that we are not free to weigh on the one hand the fines that we may have to pay against the costs of meeting the standard. Failure to meet the standard is unlawful conduct. To us, that means that in the absence of an adjustment to the standard we have to carry out a plan that meets the law, even if it means curtailing availability of larger cars and engines, restricting the availability of these products to consumers, and even if it brings the jobs dislocations of closing down plants.

Third, the cars that would be affected by such restrictions are popular today because they provide functions not otherwise available in the marketplace. Only Ford and General Motors compete in the large sedan and station wagon segments as defined by EPA's interior volume index.

If I may just digress for a moment, Mr. Chairman, there has been so much discussion of our 8.8 percent advertising on our Mark and Continental car lines. Let me just say, they are not our biggest luxury cars. Our biggest luxury car is the Town Car, the Lincoln Town Car. The demand for the Lincoln Town Car is much higher than it is for our smaller luxury cars.

Our intent with our 8.8 percent financing program is not to sell more luxury cars in total. What we would like to do is convince consumers who would otherwise buy our largest luxury car to try a smaller luxury car. But we do not think we would be very likely to convince someone who is in the market for a large luxury car that he or she should buy a compact car. We may be able to persuade him with financing incentives that he ought to give our midsized and smaller luxury cars a try.

If these products are restricted or removed from the marketplace, these real consumer needs would not disappear. Instead, consumers would either turn to trucks, with lower fuel economy, for trailer towing or keep their present full-sized cars, with lower fuel economy, as long as possible.

Fourth, the only manufacturers facing the potential for such product restrictions are those that offer a full line of products or imports competing in the specialty segment. Manufacturers producing small cars or predominantly midsized cars are basically unaffected because the standards are set at the fuel economy level of those cars.

Moreover, because CAFE compliance is dependent not only on the fuel economy of individual models, but on the sales volume of each model line sold, a full line manufacturer has to sell nearly two additional small cars in order to offset the CAFE effect of one full-sized car sale. A standard of 26 miles per gallon will still require that we sell as many U.S.-built small cars as we are selling today, and then some.

But we believe it is unrealistic to assume that we can significantly increase our small car sales in the face of 450,000 additional small cars that Japan plans to ship to the U.S. this year alone. Indeed, it was the prospect of these increases in Japanese imports that led us to conclude we had no choice but to petition NHTSA to amend the standard.

We believe Congress did not intend to outlaw certain types of cars, but to encourage producers to make these cars fuel efficient, a goal that clearly has been met. Failure to revise the standard would be unfair to consumers who need the functional attributes of larger cars and to our independent dealers.

It would also be unfair to full-line manufacturers who have made investments in fuel economy, not just in small and midsized cars, but across their entire product lineup. It seems doubly unfair to virtually remove import restrictions and then restrict the sale of the most competitive U.S. products. Curtailing production would eliminate U.S. jobs and impair Ford's ability to fund future fuel economy improvements.

The rulemaking process is now underway in accordance with the procedures and criteria that Congress built into the law. The statute clearly gives NHTSA authority to consider all relevant facts—economic disruption, employment impact, consumer restrictions, and of course the impact on energy. NHTSA should be encouraged to proceed with a review of these facts and come to a timely decision.

Senator NICKLES. Thank you very much.

Mr. Miller.

STATEMENT OF ROBERT S. MILLER, JR., EXECUTIVE VICE PRESIDENT FOR FINANCE AND ADMINISTRATION, CHRYSLER CORP.

Mr. MILLER. Thank you very much, Mr. Chairman. I am Robert S. Miller, executive vice president for finance and administration for Chrysler Corp. I might also add, like my chairman, I am a long-time veteran of the Ford Motor Co. before this decade.

I appreciate this opportunity to express Chrysler's views on automotive fuel economy standards. And in the interest of time, I will just summarize my opinions.

First, we believe this request comes entirely too late for the 1986-model year. As the committee well knows, the auto business is a long leadtime industry. Nor do we think NHTSA can possibly undertake an adequate procedural review of so complex an issue in so short a time, and, therefore, we are strongly objecting to any efforts by NHTSA to cut procedural corners.

I might add that if the petitioners do not like that, they have only themselves to blame. It was they who dictated the timing of this proceeding with an 11th-hour filing. Moreover, we have been asking ourselves lately, why did they wait until the 11th hour, until the beginning of March, to file?

Could there be, as has been hinted in the press, some linkage between the decision by the administration to lift voluntary restraint agreements on Japanese imports effective April 1 and the possible reduction in CAFE penalties now? I leave that on the table.

My second point, and even more important, is that the record itself does not support any reduction of the fuel economy standard for model year 1986 or, for that matter, for subsequent model years. The law clearly states that the standard shall be set at the maximum feasible level for each model year.

I have a chart here, the first chart, which shows that Chrysler Corp. started at the back of the pack in 1978, and yet has continued to meet the CAFE law ever since and will—I am sorry that Ms. Steed was unaware of where we stand on 1986, but we will meet the standard in 1986. Therefore, the standard must be technologically feasible.

We are meeting the law for the reason that we invested close to $5 billion in fuel efficient programs, and because we took the weight of our average car from worst in class to best in class, and because we are continuing to invest large sums in such items as turbocharged four cylinder engines, which meet the demand for fuel efficiency and high performance simultaneously.

Taking that as a given, the petitioners still argue that changes in market preferences since the time the CAFE law was enacted have dictated corporate sales mixes that make the 27.5 miles per gallon standard no longer feasible. This entire market force argument runs completely counter to the findings in a recent analysis done by NHTSA's own fuel economy office. In fact, the study shows that market forces have had no impact whatsoever on the petitioners' falling short of the 1985 standard.

Instead, it shows that the petitioners are not meeting the law because they fell short in reducing weight and introducing new technology. So what is going on here? The technology is there, as Chrysler has proven. Why have the petitioners failed to implement it, as we did? I think the difference in approaches is strikingly pointed out by two announcements coming last week out of Detroit.

One is the well documented advertisement that has been shown here about the 8.8 percent from Ford. And in case you missed it from the back of the New York Times, here is the ad heralding the Cadillac Eldorado and the Seville for 8.8 percent financing.

Meanwhile, the announcement that Chrysler came out with last week is that we are investing another $150 million in new facilities to increase our fuel efficient four cylinder engine capacity. In other words, our actions continue to show that we are making every effort to comply with your laws.

Now, I have to ask, do these ads look like the petitioners are making every effort to comply? Just as important, do special sales incentives such as these in any way reinforce the argument that the public is somehow falling all over itself to buy these types of fuel inefficient products?

My third point goes to the fairness issue. It is the point that Senator Evans and Senator Heinz zeroed in on in their recent New York Times article on this subject. To grant the petitioners relief from the 1986 standard would be grossly unfair for two reasons.

One, it gives the other manufacturers, including Chrysler, inadequate lead time to adjust the 1986 model lineups and leaves us at a competitive disadvantage in the marketplace. If the Government says that we should have taken the easy road, rather than investing in new high technology, you should have given us at least 5 years leadtime to make that switch.

Second, a rollback at any time would give the companies that honored, in Senator Evans' words, "the call of profit over the dictates of the law" a completely unearned competitive windfall. They would both continue to earn big car profits while avoiding the fines that Congress intended as the penalty for doing so.

Now, these profits are not inconsequential, and I have a second chart here that puts it in perspective. Now, according to our calculations General Motors earns approximately $8 billion in variable profits each year just on its larger cars, while Ford earns about $3 billion. By way of comparison, General Motors' potential fine for missing the current CAFE standard in 1986 would probably be about $400 million, and Ford's perhaps $80 million.

When viewed as an investment, by paying the CAFE fines in order to reap the huge large car profits, General Motors would be getting a return on investment of about 2,000 percent and Ford would be getting about a 3,800-percent return. Now, as a businessman I know what I would do in this circumstance, particularly given the legislative history which suggests that this is an option open to those companies.

It leads me to believe that the petitioners would almost certainly be inclined to just pay the fines and make the cars and not scare you with closing down big car plants and taking options away from consumers, despite the threats that have been expressed here this morning to the contrary.

I think their arguments are weak, and that brings me to my fourth and most important point. Beyond the competitive aspects of this issue, I believe this committee has an obligation to concern itself with the public policy being made here. Unless we want to set this country up for yet a third energy crisis, every effort should be made to keep the United States on the path toward energy independence, and keeping the CAFE standard right where it is is a good place to start.

If people want to waste gasoline then they should pay for the privilege, and in that regard the fines in question on noncomplying manufacturers would function as de facto energy taxes. And in the final analysis, the manufacturer has a choice: He can pass the cost of the fine along to the consumer who wants the big car or just take a little out of his profit pocket.

As a corollary to the public policy aspects of this issue, I also think we should be asking whether tampering with the CAFE standard is a legislative or an administrative issue. As recently as January, the Commerce Department was of the opinion that CAFE was an issue best handled by the legislative process, but now Commerce has apparently changed its tune.

Surely this issue is of such importance that the citizens of America should be represented through their Senators and Congressmen in the final outcome.

In conclusion, let me just say that the proposal to reduce the CAFE standards for 1986 is procedurally unsound at this late date. It is wrong on the merits of technological feasibility. It's unfair to my company, which has invested to meet the law. And it is bad public policy because it condones energy profligacy.

Thank you very much.

[The prepared statement of Mr. Miller follows:]

Statement by Robert S. Miller, Jr., Executive Vice President-Finance and Administration, Chrysler Corporation, before the Subcommittee on Energy Regulation and Conservation, of the Committee on Energy and Natural Resources, United States Senate, Washington, D.C., May 14, 1985

Thank you, Mr. Chairman. I am Robert S. Miller, Executive Vice President of Finance and Administration for the Chrysler Corporation.

I appreciate this opportunity to express Chrysler's views on automobile fuel economy standards, and especially on the request now before the NHTSA to dial back the 1986 model year CAFE standard from 27.5 miles per gallon to 26 miles per gallon.

I've submitted for the record today Chrysler's full comment to the NHTSA on this subject, in which we strongly object to any roll-back of the fuel economy standard. In the interest of time, I will summarize our opinions, and then make a few additional points.

First, we believe this request comes entirely too late for the 1986 model year. As this Committee well knows, the auto business is a long lead-time industry, and a decision that would affect product plans and product mixes as greatly as a CAFE roll-back simply cannot be made fairly at this late a date. Nor, we think, can the NHTSA possibly undertake an adequate procedural review of so complex an issue in so short a time. Therefore, we strongly object to any efforts by the NHTSA or others to speed this decision through in record time, or to cut procedural corners.

I might add that if the petitioners don't like that, then they have only themselves to blame, as it was they themselves who dictated the timing of this proceeding with their eleventh-hour filing. Moreover, we have been asking ourselves lately, why did the petitioners wait until the eleventh hour, until the beginning of March, to file? Could there be, as press reports have hinted, some linkage between the decision by the Administration to lift the voluntary restraint agreement on Japanese imports effective April 1 and a possible reduction in CAFE pentalties now? I'll leave that question on the table.

Second, and even more important, the record itself does not support any reduction of the fuel economy standard for model year 1986, or, for that matter, for subsequent model years. The law clearly states that the standard shall be set at the "maximum feasible" level for each model year.

As my first chart points out, Chrysler Corporation started at the back of the pack in 1978, and yet has continued to meet the CAFE law ever since, and will meet the 27.5 mpg standard in 1986. Therefore, the standard must be technologically feasible. We are meeting the law because we invested close to $5 billion in fuel-efficent programs, because we took the weight of our average car from worst-in-class to best-in-class, and because we continue to invest large sums in such items as turbo-charged four-cylinder engines, which meet the demand for fuel efficiency and high performance simultaneously.

Taking that as a given, the petitioners still argue that changes in market preferences since the time the CAFE law was enacted have dictated corporate sales mixes that make the 27.5 mpg standard no longer feasible. But as recently as late last year, at least one of the petitioners told the government that it would have no problem meeting the 1985 standard using carrybackwards from future years. Moreover, this entire "market forces" argument runs completely counter to the findings in a recent analysis done by the NHTSA's own Fuel Economy Office.

In fact, this study shows that market forces have had no impact whatsoever on the petitioners falling short of the 1985 CAFE standard. Instead, it shows that the petitioners are not meeting the law because they fell short in reducing product weight and in introducing new technology.

So what's going on here? The technology is there, as Chrysler has proven. Why have the petitioners failed to implement it, as Chrysler did? I think this difference in approaches is strikingly pointed by two recent actions coming out of Detroit. The first is an announcement last Thursday by Chrysler that we are investing another $150 million in new facilities to increase our fuel-efficient, four-cyclinder engine capacity. In other words, Chrysler's actions continue to show that we are making every effort to obey the CAFE law.

But the other recent action from Detroit conveys just the opposite message. And I think this ad tells the story. It's from page 7 of yesterday's Wall Street Journal, and it trumpets Ford's current 8.8 percent financing program on its big Lincoln Continentials and Continential Mark VIIs. I might add that GM is running similar ads right now for 8.8 financing on its Cadillac Sevilles and Eldorados. I have to ask, does this look like the petitioners are making every effort to comply with the fuel economy law? And just as important, do special sales incentives such as these in any way reinforce the argument that the public is somehow falling all over itself to buy these types of fuel-inefficient cars?

My third point has to do with fairness, and it's a point that Senators Evans and Heinz zeroed in on in their recent New York Times article on this subject. To grant the petitioners relief from the 1986 standard would be grossly unfair for two reasons.

First, it would give other manufacturers, including Chrysler, inadequate lead-time to adjust their 1986 model lineups, and would therefore leave us at an immediate competitive disadvantage in the marketplace. If the government says we should get back into the big-car business, then we should have at least five years of lead time to make that switch.

Second, a rollback at any time would give the companies that, in the Senators' words, "honored ... the call of profit over the dictates of the law" a completely unearned competitive windfall -- they would both continue to earn their big-car profits, while avoiding the fines that Congress intended as a penalty for doing so.

By the way, these profits are not inconsequential. As my second chart shows, according to our calculations, GM earns approximately $8 billion in variable profits each year just on its larger cars, while Ford makes about $3 billion. By way of comparison, GM's potential fine for missing the current CAFE standard in 1986 would probably be about $400 million, and Ford's would be about $80 million. When viewed as an investment -- paying the CAFE fines in order to reap the huge large-car profits --GM would still be getting a return on its investment of 2,000 percent, and Ford would get a return of 3,800 percent!

Mr. Chairman, as a businessman, this simple calculation leads me to believe that the petitioners would almost certainly be more inclined to just pay the fines due them, rather than to close their big-car plants, despite their recent threats to the contrary. Also, as I understand it, the "business judgment" rule would exempt them from shareholder legal action were they to take the former course. So we believe their arguments on these points are weak, at best.

This leads me to my fourth and most important point. Beyond the competitive aspects of this issue, I believe this Committee has an obligation to concern itself with the public policy being made here.

Unless we want to set the country up for yet a third energy crisis, every effort should be made to keep the U.S. on the path toward energy independence, and keeping the CAFE standard right where it is is a good place to start. I know I don't need to remind this Committee that even with today's slackening demand for oil, the U.S. still imports a third of its oil supply and that the single largest item in our record trade deficit is still petroleum. Moreover, I'm sure you all saw the story on the front page of last Thursday's Washington Post about a recent Interior Department study that says our nation's recoverable off-shore oil is actually less than half what it was thought to be. Given reminders such as these that the world's supply of oil is indeed finite, should we be sending a message to the American consumer to go ahead and waste gas?

If people want to waste gasoline, then they should pay for the privilege -- and in that regard, fines on non-complying manufacturers would function as de facto energy taxes. And in the final analysis, the manufacturer really has a choice: he can pass the cost of the fine along to the customer who wants the big car, or he can reduce his own profit.

As a corollary to the public policy aspects of this issue, I also think we should be asking whether tampering with the CAFE standard is a legislative or an administrative issue. As recently as January 1985, the Commerce Department was of the opinion that CAFE was an issue best handled by the legislative process. But now Commerce has apparently changed its tune. Surely, this issue is of such importance that the citizens of America should be represented, through their Senators and Congressmen, in its final outcome.

In conclusion, let me say that the proposal to reduce the CAFE standards for 1986 is:

* procedurally unsound at this late date;

* wrong on the merits of technological feasibility;

* unfair to my company, which invested to meet the law;

* and bad public policy, as it condones energy profligacy.

Thank you very much. Now, I'll be happy to answer any questions.

Senator NICKLES. Thank you very much, Mr. Miller.

Dr. Whitman, Mr. Miller, or his chart, alleges that GM faces a potential fine of $400 million. Is that close to accurate?

Dr. WHITMAN. Again, that depends on a great many factors. It is probably in the range, but I would not want to comment very specifically.

But I think that misses the real point, and that is our view that planning to pay a fine is simply not an acceptable alternative, that it does constitute unlawful conduct and that it is simply not a choice that we can or would make.

Senator NICKLES. So, is it your opinion that you could pay the fine and continue to produce the cars, or is it that you should get within the law?

Dr. WHITMAN. No, it is our view that we must find some way of planning to be in compliance with the law, and that means prresumably in one way or another restricting production of those cars or those options which are on the high side of the standard, that is, which would tend to pull us out of compliance.

Senator NICKLES. In other words, you are going to have to sell a lot fewer larger cars?

Dr. WHITMAN. That is right. There is no other way to do it in our opinion.

Senator NICKLES. And the impact economically then would be what?

Dr. WHITMAN. It would mean inevitably fewer sales, closing some plants, putting people out of work, slowing down the economy. We just do not see, as I say, any other way of doing it, if we are not granted the kind of relief that the law prospectively saw as being possible under these circumstances.

Senator NICKLES. So even though the fines for your company are in the hundreds of millions of dollars, that is not the biggest part of your problem. The biggest part of your proglem is compliance with the law?

Dr. WHITMAN. Absolutely, and there is no question that the actions we would have to take would be more expensive to us than paying the fines. As chief economist, I and my staff did those calculations and gave them to the company.

But that is not the bottom line. The bottom line is that we must be in compliance, and we will have to take those measures which will cost more, cost more to us, cost more to the American consumer and to the American worker, than simply paying the fines would.

Senator NICKLES. And you would not be meeting, I guess, the demand for some of those large cars. A lot of us, myself included, have large families and happen to need a larger car.

Dr. WHITMAN. Well, we would have to one way or another restrict production of family sized vehicles, vehicles which are necessary for certain purposes, like towing, particularly towing uphill and so forth. That is the situation we would confront.

Senator NICKLES. Could you give this committee a potential list of plants that might be forced to close?

Dr. WHITMAN. It would be very hard to pinpoint in advance which plants. We can supply for the record, of course, a list of our plants and in what States they are and what kinds of cars they produce, and we can indicate to you which lines of cars might be most vulnerable.[1]

I would not want to be in the position of trying to predict exactly which plants would be closed. But we will certainly provide that.

Senator NICKLES. Ms. Petrauskas, again Mr. Miller has given an estimate of Ford's potential fine. Is that close in your estimate?

Ms. PETRAUSKAS. I am not sure that it is, Mr. Chairman. But as the prior witness noted, the key issue for us is that we believe the law obligates us to have a plan that allows us to meet whatever standard is on the books and to carry out that plan, and it is our intention to do just that.

I might add that the view that we need have—that the law requires one to take product restrictions and does not allow the payment of penalties is one that was expressed by Chrysler in 1982 at the time that Chrysler petitioned, successfully I might add, for a relaxation of the truck standard.

I don't criticize them for doing it. They did it for the very same reasons that we are finding we have to do it today, and that is that the assumptions that were made when the standards were established turned out to be inaccurate. They asked NHTSA under the prior administration to review those facts and the administration concluded that, indeed, things had changed. Indeed, if the standard were not changed, Chrysler ran the risk of restricting its product line.

And notwithstanding the fact that perhaps other manufacturers may have been able to meet the standard, NHTSA amended the standard. We are asking for no more than that same kind of fair hearing under the same statutory criteria.

Senator NICKLES. How do you respond, Dr. Whitman or Ms. Petrauskas, either one of you, how do you respond to Mr. Miller's allegation that, if they did relax the standard to 26 miles per gallon, that it is unfair?

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[1] See responses to questions from Ford Motor Co., in Appendix I.

Ms. **Petrauskas**. I think the unfairness is one that would flow to those manufacturers who have made investments across the entire product line. When I look at EPA's top 10 overall list, I see there five Ford entries that are with the best, whether they are foreign or domestic cars.

We invested over $800 million to produce those cars, and we invested the $800 million in the United States. The two Chrysler entries that are on that list represent no investment. They are purchased from Japan.

If we look at the other end of the product line, we did not walk away from the full-sized car market. It does not take investment to walk away from the market. What we did, we invested over $2 billion in order to improve the fuel economy of those cars, so that the largest of them has better fuel economy than the smallest car had. And frankly, we also made the investment to have them avoid being gas guzzlers.

Dr. **Whitman**. May I just add, the numbers for us are different, but the story is much the same. And let me just say two things.

First, Chrysler made a business decision to get out of the large car market because the large car market was moving away from them. They have ample credits to have continued making that kind of car, if they had wanted to.

And second, it seems to me that the ultimate fairness question is what would be the fairness to the American consumer and the American worker, both of whom would be significantly disadvantaged by failing to take advantage of the provisions of the law under which we are petitioning today.

Senator **Nickles**. Thank you very much. My time has almost expired.

Senator Metzenbaum.

Senator **Metzenbaum**. Dr. Whitman, I'm much impressed by your comments and Ms. Petrauskas' comments that General Motors must be in compliance and your comment that the law obligates you to have a plan to comply with the law. You knew this was happening.

You let slippage occur by retaining the bigger bodies and the older models, by decreasing the overdrive availability as far as General Motors is concerned; Ford, by retaining the LTD, where you lost almost a full mile per gallon, and older models, such as the Crown Victoria. And on the Crown Victoria, a recent issue of Automotive News quoted a Ford vice president as saying its Crown Victoria line will be replaced just about never if it keeps going well.

Now, the question I have is, you come before us today and say: Oh, we've got to be in compliance; you just can't let us violate the law. Why didn't you think about that when you were letting this slippage occur? Why do you come to us and tell us "We're law-abiding citizens and therefore you've got to change the standards under NHTSA in order to make it possible for us not to violate the law?"

I don't understand why you permitted yourself to get in this position.

Dr. **Whitman**. Senator, that's precisely the point I was making in my testimony. We make no apology for continuing to sell cars that the public wants to buy. The reason we have kept those cars longer than we expected to is because the public has demanded them longer than we expected that it would.

That is precisely the kind of shift in market demand that we're talking about.

Senator **Metzenbaum**. Dr. Whitman, don't you agree that the public pretty much buys what is available? I've talked to dealers who've told me they couldn't get cars and they took whatever you would ship them. Right now there's a shortage, if I'm not mistaken. So you send them what you want to send them, and the dealer gets rid of what he's got on the floor because people are anxious to get a new car.

So let's not just take the position that people are coming in and asking for this model or that model. They're coming in in part and buying what's on the floor, because there's been quite a shortage in the last few years as far as supply is concerned.

Dr. **Whitman**. The fact is, Senator, that the American public has an enormous amount of choice in the kinds of cars they can buy and the people they can buy them from. But the fact is that, I think if you question those dealers closely, many of them would tell you that the kinds of cars that they've had shortages of have been precisely the larger cars that you're talking about.

And if you look at what's happened on price, the prices of small cars have gone up very substantially less even than the rate of inflation or the rate of increase on larger cars. So certainly the American public has not been forced to buy those larger cars.

In fact, very often we have been caught short in the sense that we have seen that we could have sold more of the larger cars or cars with the larger engines if we had had them available. We haven't had that problem with small cars, sir.

Senator **Metzenbaum**. Part of the point that you seem to be missing on my part is, you can sell the large cars, but you could have done things to make them fuel efficient. Robert Shelton, program manager at NHTSA, put out a memo to the docket section, in which he says:

> The primary reason why General Motors' present model year 1985 projection is 4.8 miles per gallon lower than 29.9 miles per gallon is that the average GM model weighs about

And then the figure is X'ed out—

> more than projected in 1977.

And he goes on to say:

> The redesigns, however, did not achieve the full amount of weight reduction originally projected, and, in most cases, the material substitution actions did not occur.

Why not? Why didn't these things occur?

Dr. **Whitman**. Three points, Senator. One, of course our large cars, indeed, are far more fuel efficient than they were. In fact, our largest cars today are more fuel efficient than most of our compact cars were 10 years ago.

Second, the main reason for the falling short in the projections of weight reductions is again a mixed point, because the consumers are demanding more larger cars and more cars with larger engines. That is the main reason for the fact that the weight reduction was less than projected when circumstances were expected to be different.

Finally, it is true that certain of the material substitutions we had hoped to make—and we have made many—some of the ones we had hoped to make simply turned out not to be cost effective, and we could not make them and sell the cars at a price that the consumers would accept. These substitutions simply were not cost effective, would not be cost effective in the consumer's mind when compared to the amount they could save in the increased fuel efficiency. So there were some disappointments there.

But the main reason is right back to the mix the consumer is choosing.

Senator **Metzenbaum**. Well, I must say that General Motors, our nation's largest company, has these disappointments, yet the Japanese are able to do it. Apparently Chrysler has been able to do it. And I would say there is some disappointment on the part of many of us as to General Motors' inability to do it.

Let me proceed——

Dr. **Whitman**. None of those, sir, is a full-line manufacturer.

Senator **Metzenbaum**. Ms. Petrauskas, I am concerned about the long-term health of the industry, the domestic auto industry. Now, as I understand it Ford plans to produce about 100,000 small cars in Mexico in 1987, 60,000 small cars in Japan in 1988, and has reached an agreement in principle for production in Korea as well.

Now, I believe General Motors will be increasing its small car production in Japan to about 160,000 cars, and is planning a 100,000 car venture in Korea.

Is that correct, Ms. Petrauskas, as to Ford's plans?

Ms. **Petrauskas**. Not entirely, Senator. As a generalization, our chairman has said that it is our intention to make every effort to continue to produce small cars in this country, and, indeed, if the standard is set at 26 miles per gallon we will have to build all of the small cars we are building today and then some more, because we are below the 25 miles per gallon standard.

Insofar as any production in Mexico is concerned, the production there will be—the volume of production there will be controlled by our need to have Mexican exports sufficient to offset cars and products we build in the United States and import into Mexico because of the local content requirement that country has.

With respect to Korea, the only thing that I am aware of that is under way are some discussions with the Korean producer as to whether we could buy a small number of mini-cars—that is, cars that compete, that fill a niche in which we do not participate today.

We have not—we do not really know what the volume may be. We expect it to be very small because the mini-car market in the United States is very small. Certainly it will give us an opportunity to see what the potential is in that end of the market.

Senator **Metzenbaum**. Thank you. My time has expired.

Senator **Nickles**. Thank you.

Senator Johnston.

Senator **Johnston**. Thank you, Mr. Chairman.

Dr. Whitman, why did GM and Ford wait so late, until March the 1st?

Dr. WHITMAN. Well, the fact is, sir, that what we are doing is provided—the kind of schedule we are on is provided for under the law and under NHTSA's rules. And I believe you heard Ms. Steed say that this morning.

Senator JOHNSTON. Well, did you not know that you were going to get into this situation?

Dr. WHITMAN. No. It is a situation which has been developing. We get new information all the time, and the fact is——

Senator JOHNSTON. You did not know you were going to need it until that late or what?

Dr. WHITMAN. That is right. I mean, we have watched a gradual deterioration in the external circumstances which determine our best projections—and that is all they are or ever can be—of the situation that we are going to be in.

Senator JOHNSTON. Mr. Miller, why do you think they waited so late?

Mr. MILLER. Well, I think they figured out they could probably get the law changed and have waited until this last minute. I am very suspicious about the circumstances for this 11th hour appeal. We always assumed the law was going to stay on the books. We have invested and we are presently absorbing a penalty we would estimate at about $300 million a year because we have taken the actions to invest in new technology.

I would cite sports cars as an example, where we sell turbo 4's while the competition is selling V-8's. Now, we get the performance, but it has come at a very high cost of engineering development and retooling our factories, scrapping V-8 capacity, in order to comply with the law.

The thing that is going to come out here is that our two competitors flunked the test and we are going to end up paying the fine, and that is why we are pretty excited about what is going on here.

Senator JOHNSTON. There are many who believe that American gasoline taxes being so much lower than in Europe or in Japan, that that is a very good source of revenue for the United States as well as being a good conservation measure. I happen to be against taxes, so I am not in that number, at least unless they are absolutely necessary.

Now, what would that do to the product mix that GM and Ford plan, if we put on an additional tax, a gasoline tax of some size?

Dr. WHITMAN. Well, again it depends very much on what else happened and what the details were. But there is no question that it would reduce the overall demand for automobiles and it would probably impose——

Senator JOHNSTON. For big automobiles or all automobiles?

Dr. WHITMAN. Both, I would think. I would expect it would reduce, of course, the demand for large cars, and it might actually increase the demand for small ones. But the effect would be to reduce automobile demand, and it would impose probably some additional penalty on the full-line domestic U.S. producers.

It seems to me that, if the Congress decides that it needs or wants to tax energy, it would make more sense to tax energy in all of its uses than to single out one particular use, and let the consumer decide what adjustments he or she would want to make.

Senator **Johnston**. Well, GM's strategy, product strategy, is based upon an assumption that the Congress will not do that, that we will not tax gasoline, as opposed to other forms of energy?

Dr. **Whitman**. Senator, we have found that, in trying to plan our product strategy, it does not make sense to assume just one scenario, because no matter what assumptions you put into that one scenario, you are bound to be wrong somewhere. So, instead, we have tried to look at alternative scenarios and have tried to figure out how we can position ourselves to be best positioned to respond to a variety of alternative possible outcomes.

Senator **Johnston**. There are many things that can make your scenario wrong, but taxes would certainly be on the top of the list, wouldn't it?

Dr. **Whitman**. It certainly would be among them.

Senator **Johnston**. OK. Now a moment ago I read from the Harvard Business School Research Project, which states, in part, that:

> Only Federal CAFE regulations which forbid U.S. automakers from counting new vehicles in their corporate fuel economy averages, new vehicles with less than 75 percent local manufacturing content in their corporate fuel economy averages, will keep U.S. automakers from totally abandoning the domestic production of small cars.

Do you agree with that, Mr. Miller?

Mr. **Miller**. I think that an important policy consideration that you should take into account is that the relaxation of the CAFE standards opens the door for General Motors to complete its strategy of laying off 1 million small cars overseas, and they are well along in that strategy.

Chrysler is continuing to make its investments to comply with the fuel economy laws. Our next new major car to come out will be a small car.

Senator **Johnston**. Well now, Chrysler and Mitsubishi have got a little arrangement, don't you?

Mr. **Miller**. Absolutely, Senator, and we are very proud of that. And despite the fact that we offer Mitsubishi cars through our dealerships, we are still the only one that has complied with the fuel economy standard for the domestically produced vehicles.

Sentor **Johnston**. Well, I mean, the point is, is it true or not that you think that only CAFE regulations are keeping U.S. automakers from totally abandoning the domestic production of small cars?

Mr. **Miller**. I believe from a policy standpoint that the abandonment of CAFE, like the abandonment of the VRA, is going to reduce the incentives for all of the manufacturers to devote resources to the small car end of the market. Nevertheless, we are continuing with our Liberty project to find ways to stay competitive in small cars in America if we possibly can.

Senator **Johnston**. Lee Iacocca, for whom I have great respect—I even read his book and I like him a lot—didn't he just say, after the administration announced its relaxation of the import regulations, that in effect this dooms, this sounds the death knell for domestic production of small cars?

Mr. **Miller**. I think that is certainly true, when you consider General Motors putting a million cars offshore and Ford Motor Co. expanding their offshore investigations in Mexico and Korea, as has been pointed out.

Senator **Johnston**. In fact, what you are saying is that domestic production of small cars is going overseas, with or without CAFE regulations?

Mr. **Miller**. CAFE is one of the important considerations as all of the manufacturers make their decisions as to their new product development.

Senator **Johnston**. Do you agree with that, Ms. Petrauskas, that domestic production of small cars is going overseas, period?

Ms. **Petrauskas**. No, I don't. And as I indicated earlier, our intention is to still try to retain, to the extent we can, small car production here in the United States.

I think the other important fact that should not be lost sight of is that at a 26 miles per gallon standard, which is the standard that we've asked NHTSA to establish for the period 1986 to 1989, we will still have to sell every single small car we sell today, and those are exclusively U.S.-produced cars, and actually we'll have to sell a little more because we're below 26 at the moment.

Senator **Johnston**. My time is up, Mr. Chairman. Thank you.

Senator **Nickles**. Thank you, Senator Johnston.

Senator Bumpers.

Senator **Bumpers**. Dr. Whitman and Ms. Petrauskas—"Petrauskas," do I pronounce your name correctly?

Ms. **Petrauskas**. "Petrauskas."

Senator **Bumpers**. "Petrauskas."

Ms. **Petrauskas**. Yes, sir.

Senator **Bumpers**. I think names are important and it's important to get them right. I'm glad you corrected me.

Let me ask you both, how can we be sure you're not going to be back here in 1989 if the relief you seek is granted?

Dr. **Whitman**. Nobody can say, sir, exactly what's going to happen in the future. The whole reason that we believed there was some leeway left in the law was because you can't foresee. One can construct scenarios under which that would happen.

I don't think it's very likely. I don't see now, looking at the future as best we can foretell it, that that is going to happen. But I can tell you that nothing is going to interfere with our commitment, first of all, to continued improvement in the fuel efficiency of our products, and second, to continued work on producing fuel efficient small cars in the United States.

I don't know where Mr. Miller got his million cars, but I can tell you that there is no other company that has a commitment which anywhere compares to GM's commitment to the Saturn Corporation, a corporation ultimately of $5 billion to build small, fuel efficient cars in the United States. And nothing is going to interfere, certainly not any of the relief we're petitioning for now is going to interfere, with that commitment.

Senator **Bumpers**. Would you object if Congress decided to double the fine in case you didn't comply in 1989?

Dr. **Whitman**. As I say, sir, under the legislation as we see it now, planning to pay the fine just is not a viable alternative.

Ms. **Petrauskas**. If I may, Senator, I believe there's a provision in the law that presently provides for the doubling of the fines that are paid in the event of noncompliance. But again, as Dr. Whitman has indicated, we never get to that point, because the first point we get to is the fact that not to have a plan and not to follow that plan and in fact meet the standard is unlawful, and we don't have the choice to pay the penalties.

Senator **BUMPERS**. I'm not sure I understood what you're saying. Are you saying that the law now requires the doubling of the fine in some event?

Ms. **PETRAUSKAS**. It authorizes that the fine be doubled under certain circumstances. I believe it was an amendment that was made—I want to say 1977, but I may have that wrong. Forgive me, I can't remember the criteria, but the provision is in the law now.

Senator **BUMPERS**. Ms. Petrauskas, as I understand the existing law, Canadian production is considered in establishing or determining the national fleet average. Is that correct?

Ms. **PETRAUSKAS**. We have a requirement that treats imported and domestic manufacturers differently. In other words, a domestic manufacturer has to meet CAFE on the basis of the vehicles produced in the United States and Canada, and then it can't use imported vehicles, in other words, that are sold here. Those have to meet CAFE independently.

Senator **BUMPERS**. You say it can or cannot be used?

Ms. **PETRAUSKAS**. Cannot.

Senator **BUMPERS**. So anything that Chrysler imports from Mitsubishi into this country is not going to be included in determining fuel average; is that correct?

Ms. **PETRAUSKAS**. I believe it's correct.

Mr. **MILLER**. They're not included.

Senator **BUMPERS**. Does Ford presently plan to build a new Escort facility in Mexico?

Ms. **PETRAUSKAS**. Now we have a plant to produce some small cars in Mexico, and it's a plant that will—on which we're working with, jointly with one of our Japanese partners. Again, the volume of that plant is targeted toward Mexico's local content requirement.

Senator **BUMPERS**. And not for export to the United States?

Ms. **PETRAUSKAS**. Well, we have to export from Mexico to outside of Mexico if we are going to be allowed to continue to produce vehicles in the United States and ship them into Mexico.

Senator **BUMPERS**. They have their own domestic content law down there, do they not?

Ms. **PETRAUSKAS**. Yes, sir, that's correct. And it requires us to balance what we ship into Mexico from the United States, and we ship many cars, to what's shipped out of Mexico elsewhere. And the purpose is to achieve the balance in the volumes tied to that.

Senator **BUMPERS**. Mr. Miller, has Chrysler accumulated quite a bit of credit? In other words, if you decided to exceed the limits in 1986, would you have some credit you could apply against that?

Mr. **MILLER**. Yes, that's certainly true. We've beat the standards every year and have been piling up a lot of credits. We intend to at least beat t he standards for 1986 and we expect to beat them——

Senator **BUMPERS**. What are your credits worth right now?

Mr. **MILLER**. I'm sorry, I don't have that.

Senator **BUMPERS**. Maybe we could amend the law to allow you to sell your credits to General Motors and Ford.

Mr. MILLER. Well, I think you've put your finger on exactly what's the issue here, and the issue is who's going to get the money. We're talking about somewhere in the range of half a billion dollars that the Treasury of the United States probably could use.

I'd just like to clarify the point. We've done some legal research, which I'd be happy to share with the committee and also with General Motors and Ford, who apparently haven't done this research, as to what the Congress intended when they passed the law. They specifically considered whether to empower the agency to terminate the production of the vehicles that were in excess of the standard and explicitly considered how to go about it.

And they ended up with a penalty, which was to provide the financial impetus to spur the technological development, but not to close down plants and not to deny consumers what they wanted in the end if they're willing to pay the fine. And I just don't understand where General Motors and Ford suddenly come here and try and frighten you with the thought of consumers being denied what they want and plants and people being put out of work.

It just ain't so, and I'd be happy to show them the legal underpinnings for why we say that this is the case. It would be irresponsible of me as a financial officer to do this with Chrysler if we were in their shoes.

Senator BUMPERS. Senator Jackson, our departed member of this committee, and I were the two members of this committee that were most responsible for the CAFE rules being incorporated into the Energy Policy and Conservation Act. It was debated at length here. And the conclusions reached regarding rationale and justification for it are almost precisely as you just stated.

Let me ask you one final question. What is variable profit?

Mr. MILLER. Variable profits represents the revenue you get minus the variable costs, the labor, and materials, and puts aside any allocation of the engineering, development, or tooling costs.

Senator BUMPERS. In the Chrysler Corp. if the variable profit is $8,000, what would you say the net profit is on a luxury car?

Mr. MILLER. Senator, that's $8 billion.

Senator BUMPERS. Well, I know, but I have a statistic here that shows that the luxury profit on General Motors cars is $8,200.

Mr. MILLER. Yes, sir.

Senator BUMPERS. Now, if that's the variable profit on a luxury car from General Motors, what would you estimate the net profit to be?

Mr. MILLER. Well, I'm not privy to their figures, but I would guess it's at least in the range of $4,000 to $5,000 a car.

Senator BUMPERS. Well, a $125 fine doesn't seem like an awful lot on a car that carries that kind of profit.

Mr. MILLER. No, sir; that's why I'm just astonished that they say they'd close down their plants. I think that's irresponsible of them.

Senator BUMPERS. My time is up, Mr. Chairman. Thank you.

Senator METZENBAUM. Mr. Chairman, I ask unanimous consent that that legal document be made part of the record.

[The material referred to follows:]

May 13, 1985

CAFE Penalties

GM and Ford say they cannot meet the corporate average fuel economy ("CAFE") standard prescribed by law for model year 1986, and they have petitioned the National Highway Traffic Safety Administration ("NHTSA") to roll back the standard. If they do not succeed in obtaining a rollback, they will have to pay the civil penalties prescribed by law, 15 U.S.C. § 2008, and establish reasonable timetables for achieving compliance with the standard.[1]

GM and Ford have suggested, however, that they would face consequences much more drastic than a civil penalty. They point out that it is "unlawful" to sell vehicles in violation of the CAFE standard, 15 U.S.C. § 2007, and they suggest that the risk of a shareholder derivative suit would compel them to withhold products from the market in order to avoid a violation. That approach would lead to the closing of factories, with thousands of autoworkers put out of work, and it would cost GM and Ford far more than the civil penalties. But they suggest that they would have no other realistic choice.

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[1] Those penalties could be as much as $500 million in 1986 alone. While the amout is substantial, it is nowhere near as great as the profits that GM and Ford have earned in recent years thanks to their strategy of concentrating on big, high-profit vehicles at the expense of their CAFE averages.

This line of argument is apparently intended to increase the pressure on NHTSA and Congress to roll back the standard. After all, how could anyone oppose a rollback if that is the only way to avoid enormous economic dislocation and hardship? But the argument fails because, in the real world, there is no possibility that GM and Ford would close their factories instead of paying the civil penalties.[2] The act does not bar them from selling a mix of vehicles that fails to meet the standard. If they pay the penalties and establish a program for bringing themselves back into compliance, the risk of a successful derivative suit is minimal -- certainly, much too small to convince Ford or GM to forego the penalty option in favor of the far more damaging consequences of withholding products and closing factories.

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[2] It warrants emphasis that the question of what GM and Ford will do, assuming they fail to get a rollback, has nothing whatsoever to do with the factual or legal merit of their petitions. Under the act, NHTSA has authority to roll back the standard only if it finds that the standard is above the "maximum feasible" average for the model year in question. The question before the agency is whether GM and Ford did everything reasonably possible, within the limits of technological feasibility and economic practicability, to bring themselves into compliance. In addressing that question, the agency has to look closely at what they did and did not do over the nearly ten-year period since Congress set the standard. Now, with the model year about to begin, they may have to choose between closing factories and paying penalties. But that fact says nothing about what they could have accomplished if they had taken timely action as the law required.

The language and history of the act and the administrative practice under it make clear that a manufacturer has the option of paying the penalties and continuing to sell a noncomplying mix of vehicles.

In the first place, the act does not even purport to forbid the sale of vehicles whose average fuel economy is below the standard prescribed by law. Congress considered but specifically rejected such an approach, refusing to adopt an amendment that would have permitted the Attorney General to seek a court order barring a manufacturer from selling vehicles that would put it out of compliance. 121 Cong. Rec. H5381 (daily ed., June 12, 1975). The statute provides one -- and only one -- sanction for failure to meet the CAFE requirement: payment of a civil penalty computed as provided in 15 U.S.C. § 2008(b)(1)(A).[3]

The obvious question that arises is why would Congress declare it "unlawful" to sell a noncomplying mix of vehicles and then prescribe nothing more than a civil penalty for a violation? The answer is that Congress was trying to reconcile two competing objectives: increasing fuel economy and protecting employment in the domestic auto industry.[4] It wanted to force manufacturers to increase the fuel economy of their products but not at the price of a substantial adverse impact on employment. To that end, it deliberately limited the penalties that could be imposed,[5] and no additional penalties can be implied.[6]

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[3] Congress plainly did not assume that a manufacturer who could meet the standard would necessarily have to meet the standard. A manufacturer always has the option of restricting the sale of products so as to prevent a CAFE shortfall. Thus, a manufacturer will never have occasion to pay a penalty except where it decides that the it would rather pay the penalty than keep products off the market. If Congress had intended to give the noncomplying manufacturer no choice but to withhold products from the market in order to bring itself into compliance, it would have had no reason to provide for the civil penalty in the first place.

NHTSA itself has specifically recognized that a noncomplying manufacturer can elect to pay the penalty rather than restrict the availability of products. In explaining the procedures applicable to petitions to roll back the standards for model years 1978-80, the agency noted that "[f]ailure to obtain a reduction is unlikely to have devastating consequences for a manufacturer," since a manufacturer "*could elect to pay the civil penalty specified in section 508* . . ." 42 Fed. Reg. 58938, 58946 (November 14,

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[4] *See*, *e.g.*, 15 U.S.C. § 2003(b)(1), requiring a manufacturer to separate its domestic and imported vehicles for purposes of measuring CAFE compliance. The purpose of this requirement was to prevent a manufacturer from relying on "captive imports," at the expense of domestic production, to meet CAFE requirements. *See* 41 Fed. Reg. 5742, 5775 (Jan. 29, 1979) (NHTSA's third annual report to Congress).

[5] *See*, *e.g.*, 15 U.S.C. § 2008(d)(1), which allows the Secretary to increase by rule the amount of the civil penalty, but only where he determines that the increase will not cause a significant increase in unemployment in any state or region. 15 U.S.C. § 2008(d)(1)(B)(i).

[6] *See generally* 5 B. Mezines, J. Stein, J. Gruff, Administrative Law § 42.01, at 42-3 to 42-5 & n.5 (1985) (agency may not exceed the specific sanctioning authority provided by Congress).

1977) (emphasis added). At least where the CAFE shortfall is not too great, the agency noted, the penalty "would be relatively small on a per-vehicle basis, compared to the price of the automobile." Id. Plainly enough, NHTSA did not entertain the slightest doubt that a manufacturer could elect to pay the penalties and go on selling a noncomplying mix of vehicles.

The agency gave further evidence of its understanding on this point in response to an earlier effort by Ford and GM to roll back CAFE standards. NHTSA, Report on Requests by GM and Ford to Reduce Fuel Economy Standards for MY 1981-85 Passenger Automobiles (Docket No. FE-76-02), June, 1979.IV. NHTSA stated that if a shift in product mix "were needed to comply [with the CAFE standard], major manufacturers probably would not run the marketing risks associated with a radical mix shift . . . rather than face the possibility of paying the relatively modest civil penalties prescribed under the Act." Id. at 16.

Moreover, when NHTSA set the light truck standards for model year 1982 at a level understood to be higher than that which Chrysler could achieve, it explicitly assumed that Chrysler would take no drastic action to alter its product mix. 45 Fed. Reg. 20871 (March 31, 1980) (Final Rule). The agency reasoned that Chrysler would go on selling the same mix and pay the civil penalty (assuming it could not obtain a waiver of the penalty because of the possible adverse effect on competition). Id. at 20876. At no point did the agency give any hint that such an option might not be open to Chrysler under the statute.

For the reasons just described, it is apparent that neither NHTSA nor any other government agency could bar a manufacturer from selling a noncomplying mix of vehicles or impose any sanction on such a manufacturer other than the civil penalty prescribed by law. It has been suggested, however, that a noncomplying manufacturer might have more to fear from an action brought by private citizens, including its own shareholders, than a government-sponsored suit. That argument, too, misses the mark.

No private citizen or public interest group could compel a manufacturer, through litigation or otherwise, to stop the sale of noncomplying vehicles. The statute does not give rise to a private right of action to enforce its provisions.[7] Even if there were such a right, no court would find that a private party could obtain injunctive relief against the sale of noncomplying vehicles, since that very remedy was expressly withheld from the federal government.

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[7] The Supreme Court has applied a four-part test in determining whether a federal statute creates an implied private cause of action: (1) whether the plaintiff is a member of a class for whose "especial benefit" the statute was enacted; (2) whether there is evidence of legislative intent to create or deny a private cause of action; (3) whether a private cause of action is consistent with the underlying purposes of the legislative scheme; and (4) whether the cause of action is one traditionally relegated to state law. Cort v. Ash, 422 U.S. 66 (1975). These factors point decisively against the existence of a private right of action in this case. Cf. Middlesex County Sewage Authority v. National Sea Clammers Ass'n, 453 U.S. 1, 14-15 (1981) (where statute provides particular remedy, courts must be chary of reading other remedies into it; in the absence of strong indicia of contrary congressional intent, Court was compelled to conclude that Congress provided precisely the remedies it considered appropriate).

A shareholder of the corporation would have no greater ability than private citizens generally to seek penalties against corporate management for failing to meet the CAFE standard. That conclusion is based on well accepted principles applicable to derivative actions:*

(1) A shareholder derivative suit asserts the claim of the corporation -- when the corporation itself is unwilling to press the suit -- against persons who caused "loss or damage" to the corporation. Citron v. Merritt-Chapman & Scott Corp., 409 A.2d 607, 611 (Del. Ch. 1977), aff'd, 407 A.2d 1040 (Del. 1979). A plaintiff would have to allege that corporate management's decision to pay the penalties, rather than withhold products, had caused the corporation "loss or damage." Since the penalties would inevitably cost the corporation much less than the withholding of products, the plaintiff could not even meet the most basic requirement of showing "loss or damage." Id., ("loss or damage to the corporation cannot be

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* GM and Ford are both Delaware corporations, so a court would almost certainly test the allegations of the complaint under the law of that state. See, e.g., Miller v. Esmark, Inc., 544 F. Supp. 1275, 1282 (N.D. Ill. 1982).

inferred from general and indefinite allegations and the mere assertion that conduct was 'to the detriment' of the corporation").[9] Indeed, a shareholder might be more likely to bring a derivative suit if the corporation were to withhold products, since that would cause more "loss or damage" than the payment of penalties.

(2) Even if there were a credible basis for claiming loss or damage, the shareholder would still not be able to sue without first asking the corporation to bring the suit in its own behalf.[10] If he makes the demand and the corporation determines

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[9] It makes no difference whether the shareholder attacks (1) the decision to pay the penalty rather than drastically restrict product offerings, or (2) the series of decisions, made over the course of several years, that brought GM and Ford to their current CAFE difficulties. The first approach fails because the decision to pay the penalties would entail less loss and damage to the corporation than the withholding of products. Under the second approach, the shareholder would argue that management's failure was in not taking timely action to meet the standard. But the risk of such a suit does not depend on management's deciding to pay the penalties. Even if the corporation were to withhold products to avoid a violation, a shareholder could argue that management error was responsible for the loss.

[10] Under Delaware law, a shareholder is excused from the obligation to make a "demand" on the corporation only in limited circumstances. Aronson v. Lewis, 473 A.2d 805 (Del. 1984). Demand may be excused where it would be futile -- for example, where the officers and directors of the corporation "are under an influence which sterilizes their discretion, [so] they cannot be considered proper persons to conduct litigation on behalf of the corporation." Id. at 814. "[T]he mere threat of personal liability for approving a questioned transaction, standing alone, is insufficient to challenge the independence or disinterestedness of directors . . . ." Id.

that the litigation would not be in the best interests of the corporation, the court would dismiss the action without even reaching the merits of the suit unless it were to find that the decision not to bring the suit was "wrongful." Zapata Corp. v. Maldonado, 430 A.2d 779, 784 (Del. 1981). In making that determination, the court would apply the "business judgment" rule and presume that the decision was reasonable and made with due regard for the best interests of the corporation.[11] Aronson v. Lewis, 473 A.2d 805, 812 (Del. 1984).

(3) Even if the court were to reach the merits of the suit, it would consider only whether, in deciding to pay the penalties rather than withhold products, corporate management had exercised reasonable "business judgment." Aronson v. Lewis, 473 A.2d 805 (Del. 1984). The question would not be whether the decision was right or wrong or whether the trier of fact would have reached the same decision. The court would not disturb management's decision so long as it could be "at-

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[11] The corporation would in all likelihood act on the recommendation of a specially appointed litigation committee consisting of disinterested persons -- e.g., outside directors appointed after the conduct at issue. Cf. Zapata Corp. v. Maldonado, 430 A.2d 779, 787 (Del. 1981).

tributed to any rational business purpose." Sinclair Oil Corp. v. Levien, 280 A.2d 717, 720 (Del. 1971). Moreover, the court would give management the benefit of a presumption that they had "acted on an informed basis, in good faith and in the honest belief that the action taken was in the best interest of the company." Aronson v. Lewis, 473 A.2d 805, 812 (Del. 1984).

(4) The "business judgment" rule would apply, and management's action would be presumed reasonable, even though the CAFE law declares it "unlawful" not to meet the standard. The function of a derivative suit is to obtain redress for "loss or damage" inflicted on the corporation, not to enforce general principles of public policy.[12]

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[12] As Justice Brandeis stated in Ashwander v. Tennessee Valley Authority, 297 U.S. 288, 343 (1936) (Brandeis, J., concurring):

> "Mere belief that corporate action, taken or contemplated, is illegal gives the [shareholder] no greater right to interfere than is possessed by any other citizen. Stockholders are not guardians of the public. The function of guarding the public against acts deemed illegal rests with public officials."

See also Abbey v. Control Data Corp., 603 F.2d 724, 730 (8th Cir. 1979), cert. denied, 444 U.S. 1017 (1980) (no merit to plaintiff's argument that the business judgment rule is inapplicable where the defendant-directors are charged with criminal misconduct); Rosengarten v. ITT, 466 F. Supp. 817, 824 (S.D.N.Y. 1979), ("derivative action is designed to redress wrongs to the corporation and not wrongs to the public").

For all these reasons, it is virtually inconceivable that a court would disturb the decision to pay civil penalties.

* * *

In short, a rollback is not needed to prevent drastic product restrictions and the closing of factories. If GM and Ford cannot meet the CAFE standard, they will pay the civil penalties, as provided by law, and establish reasonable timetables for bringing themselves back into compliance with the CAFE standard. The CAFE law requires nothing more of them than that.

COMMENT OF CHRYSLER CORPORATION ON THE GM AND FORD PETITIONS TO REDUCE THE PASSENGER CAR FUEL ECONOMY STANDARD FOR MODEL YEAR 1986

Docket No. FE-85-01

Chrysler Corporation submits this comment in response to the National Highway Traffic Safety Administration's notice granting the petitions of General Motors Corporation and Ford Motor Company to initiate rulemaking in connection with a possible reduction in the passenger car fuel economy standard for model year 1986. 50 Fed. Reg. 12344 (March 28, 1985).

For the reasons set forth below, Chrysler submits that (1) the petitions are untimely filed with respect to the passenger car fuel economy standard for model year 1986, and, in any event, (2) the record will not support a reduction of the standard for model year 1986 or subsequent model years.

As explained in the notice, the question now before the agency is whether to issue a proposal to reduce the 1986 standard. Id. Accordingly, Chrysler has confined itself in this comment to procedural questions and certain broad issues of policy raised by the GM and Ford petitions. If the agency puts forward a proposed rule, Chrysler will offer detailed, substantive comments on it as well as on the data and analysis on which it rests.

I. Introduction and Background

In the Energy Policy and Conservation Act of 1975, Congress set an average fuel economy standard for 1985 and subsequent model years but authorized the Secretary of Transportation to amend the standard, by rule, "to a level which he determined is the maximum feasible average fuel economy level for such model year." 15 U.S.C. § 2002(a)(4). By separate petitions, GM and Ford have asked for such an amendment. The two largest automobile manufacturers in the world, who between them control approximately 60 percent of new passenger car sales in the United States, maintain that the 27.5-mpg standard prescribed by Congress is beyond their capability -- now and for the foreseeable future -- and, therefore, that it is above the "maximum feasible" average. That Chrysler and many other manufacturers can and will meet the standard is, in their view, entirely beside the point.

The questions raised by these petitions are more complex and controversial, and have more far-reaching implications, than any that the agency has addressed in any prior rulemaking in the fuel economy area.[1]

The 27.5-mpg standard at issue here is properly considered the linchpin of the entire automobile fuel economy program -- the standard toward which all the other passenger car standards were intended to point.[2] Congress did not choose the 27.5-mpg figure at random. The choice reflected a consciously adopted, clear-cut congressional objective: to achieve by 1985 a nearly 100-percent increase in fuel economy over 1974.[3] The question presented in this proceeding, therefore, is whether petitioners can carry their heavy burden of demonstrating that this overarching objective of the statutory scheme must now be abandoned.

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[1] The agency does, of course, have prior experience with the setting of passenger car standards. But in setting such standards in the past the agency had a beacon to guide its determination -- the need to reach the 27.5-mpg level by model year 1985. See 15 U.S.C. § 2002(a)(3). Now it is the beacon itself that is up for reconsideration. On two occasions the agency has granted petitions of manufacturers to roll back light truck standards. See 44 Fed. Reg. 36975 (June 25, 1979) (granting Chrysler's petition to roll back the standard for MY 1981); 49 Fed. Reg. 41250 (October 22, 1984) (granting Ford's petition to roll back the standard for MY 1985). Neither of these proceedings involved a standard set by Congress, much less the standard that was the focal point of the 1975 legislation.

In 1980, when Congress last adopted major amendments to the Energy Policy and Conservation Act, it left no doubt as to its continued determination to have manufacturers meet the 27.5-mpg goal.[4] Indeed, Congress liberalized the rules on carryback and carryforward of credits to give manufacturers more flexibility and make it easier for them to reach that goal. As the House Committee on Interstate and Foreign Commerce explained:

> Further attempts to modify the statute, because of any professed inability to meet a standard or because of a concern that a penalty will hurt in the marketplace, will not be looked upon with great favor.

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[2] See 15 U.S.C. § 2002(a)(3) authorizing the Secretary to prescribe passenger car standards for model years 1981-84 at a level that "will result in steady progress toward meeting the average fuel economy standard established by or pursuant to this subsection for model year 1985."

[3] See, e.g., NHTSA, Report on Requests by General Motors and Ford to Reduce Fuel Economy Standards for MY 1981-85 Passenger Automobiles, DOT HS-804 731, at 1 (June 1979) (Act "adopted as a goal for 1985 an improvement of nearly 100 percent in the average fuel economy of the new passenger car fleet from 14 miles per gallon (mpg) in 1974").

[4] A recent article by Senators Evans and Heinz, a copy of which is attached, provides evidence of continuing congressional concern.

H.R. Rep. No. 96-1026, 96th Cong., 2d Sess. 10-11 (1980) (emphasis added).[5]

Although the agency has said that it is "focusing its attention on the 1986 model year," 50 Fed. Reg. 12344 (March 28, 1985), the stakes go well beyond this seemingly limited time frame. What petitioners propose is not a temporary respite to meet a short-term problem or a chance to catch their breath before pushing on toward the 27.5-mpg goal. The logic of their arguments is evidently as applicable to model years 1988 and 1990 as to 1986, and they have candidly acknowledged that what they seek is a relaxation of the passenger car standards for the foreseeable future.

A reduction in the standard for model year 1986, even if coupled with a carefully worded disclaimer about future years, would inevitably deter petitioners from adopting any expensive new measures to improve fuel economy in 1987 and beyond. Having played a winning hand for 1986, they would have every reason to predict another win for 1987 -- provided that they did nothing in the meantime to improve their capability. Their prediction of further rollbacks would, therefore, almost certainly prove self-fulfilling. Under these circumstances, the agency must proceed on the assumption that reducing the standard for 1986 is tantamount to reducing it for the remainder of the decade, or until a new oil shock alerts Americans once again (belatedly) to the ever-present need to conserve energy.

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[5] Representative David Stockman, a proponent of the 1980 legislation, made the same point:

> This in no way reduces or erodes the goal of 27.5 miles per gallon in 1985 but simply permits each manufacturer to have some flexibility along the way so that their own product development and product improvement plans might be done at the least cost and most efficiency.

126 Cong. Rec. H4421-22 (daily ed., June 3, 1980).

The stakes in this proceeding are exceptionally high in still another respect. Relief for petitioners would jeopardize the integrity of the entire fuel economy program, for it would come at the expense of Chrysler and other companies that made the huge investment required to meet the standard prescribed by law. If successful in this proceeding, petitioners would be granted a substantial competitive advantage that they would have been denied if they had complied with this important federal law.[6]

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[6] In a slightly different context, GM itself acknowledged the unfairness of changing the fuel economy rules after the fact. In 1980, GM opposed congressional enactment of the so-called VW exemption. A GM Vice President of Public Affairs explained why:

> Those manufacturers who did not manage their business plans according to [rules that have been well known for more than four years] are now asking for special treatment to avoid the adverse impact of their actions. In our view Congress should not change the requirements of the law for some manufacturers to give them a competitive advantage over the other manufacturers.

Hearings on H.R. 5140, H.R. 5260, H.R. 5944, H.R. 5944, H.R. 5908, H.R. 6943, 96th Cong., 2d Sess. 168 (1980) (emphasis supplied).

II. Procedural Issues

In view of the unprecedented importance and exceptional difficulty of the questions raised by the GM and Ford petitions, it is absolutely essential that the agency predicate any new rule on the most deliberate and exhaustive analysis of the fullest possible record. NHTSA has not promulgated specific procedural rules for considering rollback petitions for the model year at issue here, but it did promulgate such rules with respect to rollbacks for the 1978, 1979 and 1980 model years. See 49 C.F.R. § 527. Chrysler submits that these rules provide a suitable model for the minimum procedures that should be followed here.[7]

The agency canot fairly amend the standard for 1986 or any subsequent model year without taking at least the following procedural steps:

1. Gather information from all significant manufacturers, by compulsory process if necessary.
2. Carry out a searching investigation behind petitioners' self-serving assertions to determine what they did and did not do to meet the standard and the real reasons for their actions.
3. Before deciding whether to issue any proposed new rule, take account of the information obtained from petitioners and other manufacturers and prepare (a) a preliminary regulatory impact analysis, (b) a preliminary environmental impact analysis and (c) a preliminary economic impact analysis.
4. Before opening the comment period on any proposed new rule, put on the public record

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[7] The statutory provision governing procedures for a rollback of the 1978-80 standards is the same as the one that governs this proceeding. 15 U.S.C. § 2002(h).

the analyses referred to in item 3 above plus all or virtually all of the supporting information submitted by petitioners, relying on the agency's broad authority to disclose even confidential information where relevant to a proceeding such as this.

5. Provide a comment period on any proposed new rule of at least 60 -- and preferably 90 -- days.
6. Hold public hearings on any proposed new rule after the close of the comment period.
7. Consult with the Secretary of Energy and the Administrator of the Environmental Protection Agency.
8. Take account of the written comments received, the testimony given at the public hearings, the results of the agency's own analysis, and the comments of the Secretary of Energy and the EPA Administrator, and prepare and publish (a) a final regulatory impact analysis, (b) a final environmental impact analysis, and (c) a final economic impact analysis.

Several of these procedural requirements warrant brief comment.

(a) Public Disclosure of Information

The statute and regulations governing this proceeding permit the withholding of information submitted in connection with the proceeding only where release would cause "significant competitive damage." 15 U.S.C. § 2005(d)(1), 49 C.F.R. § 512.5(b). Even material that *is* "confidential" within the meaning of the Act may be disclosed where relevant to the proceeding, 15 U.S.C. § 2005(d)(1), and must be disclosed where necessary for the public, including manufacturers affected by the rule, to understand and evaluate the facts on which the agency proposes to act and have a meaningful opportunity to comment.

In announcing its rules for considering petitions to reduce the 1978-80 standards, NHTSA stated its intention to "grant confidential treatment to information contained in reduction petitions only in exceptional, and presently unforeseen, circumstances." 42 Fed. Reg. 58938, 58946 (November 14, 1977) (emphasis added). NHTSA based this policy on considerations that apply equally here: (1) commenters cannot participate effectively in the process without access to the entire petition, including supporting data; (2) submission of a petition is voluntary, and petitioners must be expected to "balance their need for a reduction against the potential danger from release of the contents of their petition;" and (3) the information submitted is unlikely to be of significant competitive value, given the leadtime required to make changes in production plans. Id. at 58945-46.

In this case, petitioners have requested sweeping restrictions on the public's access to their submissions. For example, GM has sought confidential treatment for, among other things, its response to NHTSA's request for "a quantitative analysis providing the basis for GM's belief that 26.0 mpg is the maximum feasible standard for the model years covered by [GM's] petition." March 11, 1985, letter of Barry Felrice, NHTSA, to T.M. Fisher, GM. Suppression of this information, which goes to the very heart of GM's petition, would very substantially limit the public's ability to comment on the petition. GM is asking the agency to reduce a congressionally prescribed standard toward which the entire industry has worked for ten years, without permitting the public to know or comment upon the very reasons why GM believes that it cannot reach the standard.

Some small part of the information submitted by petitioners may, conceivably, bear so remotely and indirectly on the questions at issue in this proceeding, and the competitive damage certain to follow from disclosure may be so great, that the agency could properly withhold it from the public. But the amount of information in this category cannot be substantial. The present capability of petitioners, and the reasons why they allegedly cannot do better, are the central issues in this proceeding. The best evidence on these points is in petitioners' own files, and virtually all of the material that bears on these points can be disclosed without any real risk of competitive damage.*

(b) Hearings

In addition to providing a substantial period for written comment -- less than 60 days would certainly be insufficient, given the difficulty and importance of the issues presented and the amount of information that commenters would have to review and analyze -- the agency would also have to make arrangements for oral hearings. The Act assures all interested persons an opportunity to make an oral presentation in connection with a proceeding to amend the passenger car standard for 1985 and subsequent model years. See 15 U.S.C. § 2002(h). Hearings must follow the close of the comment period so that participants have an opportunity, before testifying, to review all the comments submitted to the agency on the subject of the proposed rule and all the supporting data. In addition, petitioners must be required to provide representatives for questioning at the hearing, and interested persons must have the opportunity to submit written questions to be propounded to petitioners' representatives and other witnesses, as provided in the procedures for considering petitions to reduce the 1978-80 standards. 49 C.F.R. § 527.15(d), (f).

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* For example, information concerning precisely what Ford and GM did and did not do in prior model years, which is critical to the analysis, is presumptively not entitled to protection from disclosure. Information about what they plan to do in the next two to three years should also be disclosed. Such information is generally well known to competitors by this point, and the leadtime is insufficient, in any event, to permit them to take advantage of it in shaping their own plans. See 42 Fed. Reg. 58946 (November 14, 1977) (procedures for considering reductions of the standards for model years 1978-80). Petitioners should not be heard to complain that disclosure would place them at a competitive disadvantage, since that is a necessary price of the substantial advantage they now seek over their competitors that played by the rules. Id.

(c) Untimeliness of the Petitions

Given all the procedural steps that the agency must work through and the difficulty and importance of the issues presented, it is extremely disturbing that NHTSA has proposed to focus on the 1986 model year and suggested that by shortening each phase of the rulemaking process it might be able to promulgate a rule before the beginning of that model year.* NHTSA has never acted so precipitously in the past, even where the issues under consideration involved nowhere near the same degree of complexity, importance and controversy.[10]

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* In its notice, NHTSA acknowledged that an amendment reducing the standard for model year 1986 must be adopted before the model year begins -- i.e., before the fall of 1985. 50 Fed. Reg. 12344 (March 28, 1985).

In acting on a petition to reduce the light truck standard for model years 1984-85, the agency stated that, "[a]s a general matter, petitions regarding a particular model year's standards should be submitted no later than the early part of the preceding calendar year, and preferably before that time." 49 F.R. at 41255-56 (October 22, 1984) (emphasis supplied). It also pointed out that the time necessary to complete a proceeding "will vary greatly depending on the complexity and controversiality of the issues involved." (Id. at 41255). Now NHTSA proposes to address the GM and Ford petitions in half the time spent to amend the light truck standard, even though the "complexity and controversiality of the issues involved" mandates precisely the opposite result.[11] Moreover, the timing of the agency's action in the light truck case is itself now the subject of litigation. Center for Auto Safety v. National Highway Traffic Safety Administration, D.C. Cir. No. 85-1231. Unless it is prepared to risk the kind of rush to judgment that could taint the entire proceeding, the only appropriate course is for the agency to announce immediately that it is already too late to consider a change in the standard for model year 1986. The agency could then begin a deliberate and exhaustive inquiry, on a timetable that would be fair to all interested persons, into the standard for the 1987 model year.

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[10] It took NHTSA 11 months to grant Ford's petition to roll back the light truck standard for model year 1985 -- six months to complete the preliminary analysis and publish a proposed rule, 49 Fed. Reg. 22516 (May 30, 1984), a 30-day public comment period, and four more months of analysis before issuing the final rule. 49 Fed. Reg. 41250 (Oct. 22, 1984). The agency granted Chrysler's request for a rollback in the light truck standard for model year 1981 some nine months after the request was filed.

[11] The light truck standard was set by NHTSA itself through rulemaking, while the passenger car standard was set by Congress through legislation. When the agency acted on the light truck standard, it had before it the well developed record it had itself established when it originally adopted the standard under review. Here, the agency has no pre-existing baseline against which to measure the data petitioners will submit.

If this approach entails some hardship for petitioners, they have only themselves to blame. It was petitioners who dictated the timing of this proceeding. Nothing in their submissions to the agency, at least insofar as the public portions are concerned, begins to explain why they waited so long to initiate this proceeding.[12] The "changed circumstances" on which they rely did not come into existence within the last few weeks. On the contrary, they trace these changed circumstances back through three or more model years. Because of their late filing, they face a predicament of their own making. They are entitled to no special procedural relief.[13]

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[12] In the light truck rollback case referred to above, Ford petitioned for a reduction in the standard for MY 1985 on November 21, 1983 -- more than three months earlier in the annual cycle than the petitions were filed in this far more difficult and important proceeding.

[13] Any potential hardship for petitioners must be balanced against the hardship that a last-minute rollback would inflict on those companies, like Chrysler, that have taken the steps necessary to meet the standard. They would have no opportunity to adjust to this new competitive environment -- an environment in which advantage had shifted to those that did not meet their legal obligation.

III. The Record Does Not Warrant a Reduction in the Standard for Model Year 1986

At the heart of petitioners' case for a reduction in the fuel economy standard are four supposed facts that are said to explain why the 27.5-mpg standard is beyond the maximum feasible average for model year 1986: (1) consumer preferences have changed, (2) the energy crisis is over, (3) Japan has not renewed the Voluntary Restraint Agreement, and (4) serious economic harm would befall petitioners if forced to meet the standard. As Chrysler demonstrates in Attachment A, these so-called facts cannot withstand close scrutiny. They have little, if any, direct bearing on the real issue before the agency, and they must not be allowed to divert attention from the major task at hand. That task is to determine whether petitioners did everything possible, within the limits of technological feasibility and economic practicability, to meet the 27.5-mpg standard prescribed by Congress. To that end, the agency must be prepared to carry out a no-holds-barred investigation into what petitioners did and did not do to meet the standard.[14]

NHTSA has already requested a certain amount of information relevant to such an inquiry, but the GM and Ford responses received to date -- at least those available for public inspection -- give little reason for confidence that petitioners understand the kind of information they will eventually have to provide and the kind of scrutiny to which they will have to be subjected. NHTSA cannot rely on petitioners' selected facts and self-serving, after-the-fact explanations crafted for use in this proceeding. It must obtain, by compulsory process if necessary, the primary data -- contemporaneous records of GM and Ford -- that reveal what actions these companies took and why they took them.

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[14] The question is not, of course, whether petitioners are now capable of meeting the standard on a day's notice. Congress gave them 10 years to meet the standard, and the "maximum feasible" average is the highest level they could have reached if they had done everything reasonably possible over the course of that entire period. Assuming that the standard is not reduced, petitioners will have to establish reasonable timetables to bring themselves back into compliance. If they cannot meet the 1986 standard even with carryback and carryforward credits, they will, of course, have to pay civil penalties, which they can well afford. See Attachment A at page 6.

The issues that the agency must carefully address include the following:

1. Why are GM and Ford unable to meet the 27.5-mpg standard, when Chrysler, a company with far fewer resources, can?
2. Why did GM and Ford engage in wholesale deferral of programs to produce fuel-efficient cars? Were they attempting to maximize profits by concentrating their efforts on products with the highest profit margins, with little or no regard for their CAFE obligations?
3. If petitioners plan to introduce new, fuel efficient vehicles (e.g., GM's W-body or GM10 program) in the next few years, is there any reason why they could not have had these vehicles ready for the 1986 model year?
4. Why did GM elect to close plants that build fuel-efficient cars?
5. Why have GM and Ford elected to retain, in some cases until 1990, their older, fuel-inefficient rear-wheel-drive models that compete with their own newer front-wheel-drive cars?
6. Have petitioners done everything they can to influence consumer demand in favor of fuel-efficient cars, or have they pursued market-

ing programs that encourage demand for less efficient cars in order to maximize profits?

7. Why are GM and, to a lesser extent, Ford increasing their imports of cars that will compete with their own fuel-efficient domestic offerings, in apparent defiance of the 1975 Act's explicit policy of protecting domestic employment, when the result of these import programs is to exacerbate their CAFE difficulties?

Chrysler does not know all of the answers to these questions. Neither, at least as of now, does NHTSA. What we do know, however, strongly suggests that GM and Ford consciously decided to disregard their legal obligation and build fuel inefficiency. They doubtless knew that the profitability of their older, less fuel-efficient models would more than make up for any civil penalties they might eventually have to pay (assuming a lack of success in rolling back the standard).

Before it grants any reduction in the standard Congress prescribed for model year 1986, NHTSA will have to satisfy itself -- and the American people -- that petitioners could not have met the 27.5-mpg standard even if they had applied themselves with determination and without reservation to the task of meeting it. The evidence now available does not suggest that they made any such effort.

CONCLUSION

For the reasons summarized in this comment, Chrysler submits that the petitions should be considered untimely filed for model year 1986 and that a reduction in the standard cannot be justified in any event.

April 29, 1985

ATTACHMENT A

Chrysler's Preliminary Response to Petitioners' Substantive Arguments for a Rollback

A. Changing Pattern of Consumer Demand

GM and Ford maintain that consumer preferences have shifted decisively toward larger, heavier vehicles, with larger engines and more optional equipment -- all of which makes it more difficult for them to meet the CAFE standard prescribed by law. While a change in consumer preferences over the past three to four years is undeniable,[1] that fact is dispositive of nothing in itself.

Despite staggering losses that very nearly destroyed the corporation, Chrysler managed to make the investment needed to build cars that consumers wanted and that could still meet the CAFE standard. Far from jeopardizing the corporation's economic position, Chrysler's current product mix has carried it into the most profitable period in its history.

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[1] Consumers have not, in fact, become as indifferent to fuel economy as petitioners would have one believe. Ford argues that consumer surveys show fuel efficiency to be only fifth in priority in a list of factors that consumers consider in selecting a car. Letter of H.O. Petrauskas, Ford, to D.R. Steed, NHTSA, March 21, 1985, p.3. But it neglects to indicate how many other factors are on the list. Survey data available to Chrysler indicate that fuel efficiency continues to rank in the highest tier of the many considerations that consumers take into account. Moreover, the legislative history of the Act makes clear that Congress considered the nation's energy security to be too important to leave to market forces. The central purpose of the Act was to push manufacturers toward fuel efficiency at a rate faster than consumer preferences might otherwise have carried them. See pages 2-4 infra.

Petitioners bear a heavy burden to explain why Chrysler -- a much smaller company with nowhere near their financial resources -- can meet the standard when they cannot. The obvious explanation is that petitioners have not done everything they reasonably could to meet the CAFE standard in the environment in which all manufacturers have had to work.

Unless petitioners can meet their burden of showing that they did everything reasonably possible to shape consumer demand in order to remain in compliance, a shift in consumer preference is utterly beside the point. Congress did not give manufacturers the right to take consumer demand as they find it. On the contrary, Congress specifically rejected the argument that free market forces could be counted upon to push the industry toward the desired level of fuel efficiency. As NHTSA itself has pointed out, the legislative history makes clear that Congress "explicitly recognized that major shifts in sales mix could be required to meet the standards and implicitly recognized that these shifts might not result voluntarily but could require government pressure on the manufacturers and/or consumers." 42 Fed. Reg. 33534, 33543 (June 30, 1977) (setting passenger car standards for model years 1981-84).

The 1975 Report of the Senate Commerce Committee on legislation to provide for mandatory fuel economy standards explained that market forces resulting from higher gasoline prices were not strong enough to bring about the necessary result:

> "Experience has shown that public reaction to higher gasoline prices has not been suffi-

> ciently strong to persuade the auto industry to make an all-out effort to market fuel-efficient automobiles."

S. Rep. No. 94-179, 94th Cong., 1st Sess. 9 (1975).

The same report also noted that

> It is inherent in the goals for fuel economy improvement established under section 504(a), and the standards that will result from them, that manufacturers indeed can influence consumer preference for the types of automobiles and light duty trucks they produce or import.

Id. at 25.[2]

The Act reflects a clearly articulated congressional concern that, in the absence of mandatory standards, manufacturers would encourage the sale of big, inefficient cars. During congressional debates on the Act, proponents of mandatory standards repeatedly criticized the domestic automobile industry for allegedly trying to sell larger numbers of big cars for big profits, with nearly complete indifference to energy efficiency.[3] That is exactly what GM and Ford appear to have done in the last three years, and now they seek to avoid the penalties properly attributable to this very course of conduct.

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[2] GM itself recognized that mandatory fuel economy standards would necessitate a change in product mix that might conflict with consumer demand in any given year. GM's President E.M. Estes stated in a letter to Interior Secretary Rogers Morton:

> It should be noted that such standards could have the effect of placing restrictions on the availability of certain cars -- regardless of consumer needs or intended use of such vehicles. Moreover, it is frankly conceivable that the customer demand for a mix of various cars that would emerge in any particular model year would be quite different from the mix which a manufacturer would be required to produce in order to conform his production to a fuel economy standard. The probability is that the manufacturer would be faced with the requirement to reduce his output of a particular type of passenger car to redress the balance and come within the standard.

Hearings Before the Subcommittee on Energy and Power of the House Committee on Interstate and Foreign Commerce on the Implications of the President's Proposals in the Energy Independence Act of 1975, 94th Cong., 1st Sess. 454 (1975) (reproducing the letter to Secretary Morton).

A careful review of all the facts will demonstrate that petitioners have not done everything they reasonably could to assure their compliance. They have deferred and delayed programs to produce more fuel-efficient vehicles; kept older, fuel-inefficient models in their product plans long after they were scheduled to be withdrawn, with the result that these older models compete with their new fuel-efficient product offerings;[4] and resisted marketing and pricing efforts that could have significantly alleviated their CAFE difficulties. Contrary to petitioners' claim, marketing efforts can encourage the sale of fuel-efficient vehicles. Where petitioners have tried such measures -- as in the case of Ford's current 8.8-percent financing program on the fuel-efficient Tempo/Topaz -- the programs have proved very successful.

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[3] See, e.g., 121 Cong. Rec. S12632 et seq. (daily ed., July 15, 1975) (remarks of Sen. Hollings); Hearings Before the Subcommittee on Energy and Power of the House Committee on Interstate and Foreign Commerce on the Implications of the President's Proposals in the Energy Independence Act of 1975, 94th Cong., 1st Sess. 454 (1975) (Statement of Leonard Woodcock). As Senator Hollings put it, "we tried it voluntarily, and everybody agrees now it is just against their pocketbooks." 121 Cong. Rec. S12638 (daily ed., July 15, 1975). The Senate Commerce Committee noted that a voluntary fuel economy program was unlikely to work because of the "economic disincentives" for the industry to pursue the objective of fuel economy "too diligently." S. Rep. No. 94-179, 94th Cong., 1st Sess. 7 (1975). The Committee noted that "historically, the biggest, least fuel-efficient cars have been associated with the biggest profits." Id. at 7-8.

[4] For example, the November 12, 1984, Automotive News reported that GM had shelved a downsizing program at its St. Therese, Quebec, plant. The article also indicated that GM and Ford have extended their RWD full-sized cars to 1988 and 1990, respectively. Similarly, the February 11, 1985, Automotive News reported that GM had extended the life of its RWD Fleetwood through 1986 and possibly into the 1987 and 1988 model years. The same issue reported that Ford is planning an update of its big RWD

(Footnote continued)

In short, petitioners are not helpless bystanders confronted with a situation they cannot affect or control. They had ample opportunity to adjust their strategy for achieving CAFE compliance in the face of changing consumer preferences. Instead of doing so, they apparently decided to maximize their profits at the expense of their fuel economy efforts, gambling on their ability to obtain a rollback.

B. Diminished Pressure on Gasoline Supply and Prices

Underlying the GM and Ford petitions is the wishful assumption that the nation will not soon confront another period of limited fuel supply and rapidly climbing gasoline prices. To be sure, gasoline supplies now are plentiful, and real prices are relatively stable.[5] But the question before the agency is not whether this country still needs an energy policy. Congress did not authorize the agency to repudiate the automobile fuel effi-

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(Footnote 4 continued from previous page) cars within the next year and will sell these cars through the rest of the decade.

[5] It should be noted, however, that gasoline prices jumped 3.5 percent in March, 1985. See New York Times, at A1 (April 24, 1985).

ciency program. Nothing in the language of the statute or its legislative history suggests that the CAFE standard was to bob up and down in response to ephemeral assessments of the long-term energy outlook. On the contrary, the Act deliberately pushed the industry toward steadily increasing fuel economy, regardless of short-term supply considerations. Petitioners should not have to be reminded that the oil shock of 1979 followed an earlier period in which energy supplies were plentiful and many believed that another oil crisis was out of the question.

C. Nonrenewal of the Voluntary Restraint Agreement

Although nonrenewal of the Voluntary Restraint Agreement will mean an increase in Japanese imports and more difficulty for the domestic manufacturers in selling their own smaller, fuel-efficient vehicles, that development does not warrant a change in CAFE requirements.

First, the Act predates the VRA and should continue in full force after the VRA's demise. Congress expected U.S. manufacturers to meet CAFE standards in the face of tough competition from abroad.

Second, the largest single share of the probable increase in Japanese imports is likely to flow to one of the petitioners. GM plans to import several hundred thousand vehicles from its Japanese partners Isuzu and Suzuki, and to have Toyota build for it at Fremont, California, some 250,000 vehicles with too little domestic content to qualify as "domestic" within the meaning of the Act. See 15 U.S.C. § 2003(b)(2)(E). If GM's Japanese strategy takes sales from its domestically built small cars, it should not be heard to complain about the resulting difficulty in meeting the CAFE standard.

The Act was carefully designed to serve a dual purpose: enhancing fuel economy and protecting employment in the U.S. auto industry by requiring manufacturers to build cars in this country to meet the CAFE standard. To that end, the Act requires manufacturers to comply separately for their domestic and non-domestic fleets. 15 U.S.C. § 2003(b)(1). Since GM is barred from counting "captive imports" in its domestic fleet, it would now take a backdoor route and reduce the standard that its domestic fleet must meet. The ultimate result is the very one that Congress was determined to avoid -- cession of the market for small, fuel-efficient cars to the Japanese and other overseas suppliers.

D. Risk of "Serious Economic Harm"

GM and Ford contend that they will suffer serious economic harm if NHTSA does not reduce the fuel economy standard for automobiles to 26.0 mpg.[4] They suggest that compliance with the current standard can only be achieved through immediate and drastic product restrictions, which would lead to plant closings and job losses. In fact, if GM and Ford are unable to obtain a rollbaof the standard, they will pay the civil penalties, keep their factories open, and establish reasonable timetables for bringing themselves into compliance.[7]

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[4] It is not at all clear how petitioners arrived at the 26.0 mpg figure, aside from the fact that the statute provides that the standard cannot be lowered any further without congressional involvement. It would appear from the GM and Ford submissions now on the public record that, as luck would have it, 26.0 is the exact level that petitioners can reach without "serious economic harm." Although requested by NHTSA to provide an assessment of the impact of a standard between 26.0 and 27.5, GM and Ford have failed to provide any response to this query in their public filings.

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[7] Some have argued that a manufacturer cannot continue to sell a noncomplying mix of vehicles, even with payment of the civil penalty, because to do so would constitute commission of an illegal act and leave it vulnerable to a shareholder derivative suit. In fact, as NHTSA has recognized, the Act clearly permits a manufacturer to choose between withholding products to achieve immediate compliance and paying the civil penalty. 42 Fed. Reg. 58946 (November 14, 1977) (announcing procedures for considering petitions for reduction of the 1978-80 standards). Congress specifically rejected a proposal that would have permitted the Attorney General to seek an injunction against the sale of cars that would put a manufacturer out of compliance. 121 Cong. Rec. H5381 (daily ed., June 12, 1975). If a shareholder were to bring a derivative action against directors or officers for continuing to sell vehicles in violation of the standard, management's decision would be upheld under the "business judgment" rule, at least so long as the corporation was implementing a plan to bring itself back into compliance on a reasonable timetable.

ATTACHMENT B

Minimum Procedural Requirements

Before NHTSA could issue a final rule amending the standard for 1986 or any subsequent model year, it would have to take at least the following procedural steps:

1. Gather information from all significant manufacturers, by compulsory process if necessary.
2. Carry out a searching investigation behind petitioners' self-serving assertions to determine what they did and did not do to meet the standard and the real reasons for their actions.
3. Before deciding whether to issue any proposed new rule, take account of the information obtained from petitioners and other manufacturers and prepare (a) a preliminary regulatory impact analysis, (b) a preliminary environmental impact analysis and (c) a preliminary economic impact analysis.
4. Before opening the comment period on any proposed new rule, put on the public record the analyses referred to in item 3 above plus all or virtually all of the supporting information submitted by petitioners, relying on the agency's broad authority to disclose even confidential information where relevant to a proceeding such as this.
5. Provide a comment period on any proposed new rule of at least 60 -- and preferably 90 -- days.
6. Hold public hearings on any proposed new rule after the close of the comment period.
7. Consult with the Secretary of Energy and the Administrator of the Environmental Protection Agency.
8. Take account of the written comments received, the testimony given at the public hearings, the results of the agency's own analysis, and the comments of the Secretary of Energy and the EPA Administrator, and prepare and publish (a) a final regulatory impact analysis, (b) a final environmental impact analysis, and (c) a final economic impact analysis.

ATTACHMENT C

Issues That the Agency Must Address

Before it could even determine whether to propose a rule to reduce the standard for 1986 or any subsequent model year, NHTSA would have to carry out a penetrating review of petitioners' records to explore at least the following issues:

1. Why are GM and Ford unable to meet the 27.5-mpg standard, when Chrysler, a company with far fewer resources, can?
2. Why did GM and Ford engage in wholesale deferral of programs to produce fuel-efficient cars? Were they attempting to maximize profits by concentrating their efforts on products with the highest profit margins, with little or no regard for their CAFE obligations?
3. If petitioners plan to introduce new, fuel efficient vehicles (e.g., GM's W-body or GM10 program) in the next few years, is there any reason why they could not have had these vehicles ready for the 1986 model year?
4. Why did GM elect to close plants that build fuel-efficient cars?
5. Why have GM and Ford elected to retain, in some cases until 1990, their older, fuel-inefficient rear-wheel-drive models that compete with their own newer front-wheel-drive cars?
6. Have petitioners done everything they can to influence consumer demand in favor of fuel-efficient cars, or have they in fact pursued marketing programs that encourage demand for less efficient cars in order to maximize profits?
7. Why are GM and, to a lesser extent, Ford increasing their imports of cars that will compete with their own fuel-efficient domestic offerings, to the detriment of their fuel economy averages and in apparent defiance of the 1975 Act's explicit policy of protecting domestic employment?

ATTACHMENT D

The New York Times,
April 20, 1985

Reject the Plea From Ford, G.M.

By Daniel J. Evans
and John Heinz

WASHINGTON — After posting record profits last year, two of the three big auto makers — Ford and General Motors — are asking help from the deficit-ridden Government. The Government should reject the plea, which would set a bad precedent, deprive Federal coffers of millions of dollars and reward companies that drag their feet, giving them unfair competitive advantage.

Specifically, the auto makers are asking the Government to ease its fuel-efficiency standard for automobiles. They say that gasoline prices are coming down and that consumers want bigger, less-efficient cars. What they do not tell you is that easing the standard could save them approximately $500 million in fines for not reaching the required fuel-efficiency level. And that in turn is revenue that could be used by the Government to fund important social programs.

The fuel-efficiency standard — called the "Corporate Average Fuel Economy" standard — is part of a law passed in 1975. Car manufacturers were given 10 years to increase the average fuel economy of their new fleets to 27.5 miles per gallon.

Ford and G.M. will not meet the standard this year and have asked the Transportation Department to roll back the standard to 26 miles per gallon. The department has indicated that it plans to do so and is taking public comments until April 29.

The corporate average fuel economy standard is important to our effort to reduce dependence on imported oil and to preserve national security. If all cars on the road today achieved 27.5 miles per gallon, rather than the current average of about 17, oil imports could be reduced by more than 25 billion gallons a year. That translates to 130 days of oil imports. Fully a third of our oil supplies still comes from foreign wells, some of them in unstable regions of the world. Easing the standard could make us look foolish if events in any of those regions led to another oil shortage.

Ford and G.M. claim that falling gasoline prices have encouraged buyers to demand larger cars. Therefore, they assert, they are unable to sell enough small cars to meet the standard for their total fleet unless they make their small models more attractive by providing special financing and make their larger cars less attractive by raising prices. These actions, they say, would limit buyers' options and "disrupt the free market in a manner that will lead to serious economic harm."

If the Government has set a goal that industry is unable to meet, or that causes undue hardship, then we should reconsider the standard. But before we get carried away by the "regulatory burden" argument, we must look at the record of another major auto maker, the Chrysler Corporation. Chrysler made a profit of $2.4 billion, met the fuel standard in 1984 — and will meet it in 1985.

Both should meet U.S. fuel standards

There are also questions of fairness and corporate responsiveness to the law. Chrysler invested approximately $4.4 billion, sold smaller cars (which have smaller profit margins) and obeyed the law. Ford and G.M., which can construct the necessary small cars, chose to enjoy the bigger profit of marketing a fleet of larger cars. Now they want to evade the consequence of their previous decisions. Is it really good public policy to reward these manufacturers for honoring the call of profit over the dictates of the law? If the standard is rolled back, Ford and G.M. will continue to reap the profits of a larger fleet, avoid breaking the law and evade large fines. And Chrysler will be penalized for obeying the law.

Lowering the standard would jeopardize our energy security goals. It is also unnecessary. The fact that Chrysler has met the standard and still turned a substantial profit shows that the standard is technologically feasible and economically practicable. It would punish a manufacturer that has fulfilled its corporate responsibilities to the Government, reward two corporations for failing to obey the law and cost the Government [illegible] billion dollars in potential

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Daniel J. Evans, Republican Senator from Washington, is new chairman of the Alliance to Save Energy. John Heinz, Republican Senator from [illegible] was chairman for the

Senator NICKLES. Senator Rockefeller.

Senator ROCKEFELLER. Thank you, Mr. Chairman.

Ms. Petrauskas, in your testimony, you used what we in West Virginia have heard about and seen occur all too often, a terrifying phrase that refers to job dislocations and the closing down of plants.

And I have learned through 8 years of being Governor that such statements are sometimes true and that sometimes they are only a threat which brings about predictable public reactions on the part of citizens and public officials and which causes things to happen which the people who made the threats wanted to happen in the first place, even though they might not have been true.

GM and Ford argue that if they violate the law and exceed the CAFE standard, payment of fines would leave them subject to shareholder derivative action, and those suits are in fact what is really scary to those two companies; but given the large car variable profits that Senator Bumpers referred to, approximately $8,200 per car, wouldn't stockholders in your judgment fail in such an action if the companies were able to show that profits are higher by staying in violation of the law instead of shutting down large car plants?

Ms. PETRAUSKAS. I can't answer that question, Senator Rockefeller. I can say, though, that again we never get—as, earlier, one of your colleagues asked the question, "What about a doubling of the penalty?" We would never get to that question, because we first stumble over the fact that we would be committing unlawful conduct.

If I may just add, Senator, we do not hold up the possibility of job losses as a threat. We will take—if the standard is not amended, I can assure you we are going to do everything we can to try to find a way to meet the law that minimizes the impact on our employees and minimizes the impact on our dealers.

Senator ROCKEFELLER. I appreciate that.

Ms. PETRAUSKAS. The reason we have waited so long to file is that we tried to work out every alternative we could so that we would not have to come down here and ask for the standard to be changed. But the straw that broke the camel's back in our case was the decision to not continue the voluntary restraints, and, in light of that decision, it did not seem that we could realistically speculate that maybe somehow we can significantly increase the substantial number of small cars we sell today and, thus, be able to save the sale and production of our larger cars.

Senator ROCKEFELLER. But having heard all of that, you would not deny, would you, that there had been at some point in discussions back at your company the possibility of stockholder derivative actions?

Ms. PETRAUSKAS. Yes, and they have been discussed, as I recall, and they have come up at various hearings with respect to this legislation over the last 10 years.

Senator ROCKEFELLER. You know, in environmental problems when people talk about closing plants and they throw at those of us in West Virginia and other places this business of, we're going to close your plant down if you don't do what we say you should do, it's often worked out, as it has been in a number of cases—and the one that I'm thinking of right now is the Weirton Steel Corporation, which went through some extraordinary successes and sacrifices and is now on the road to a strong come-back—that fines are in fact a mechanism wherein the Government forces compliance. The fines are levied, but then there is also time given to force the company to do what they were fined for not doing in the first place; and that therefore a shutdown or layoff is not necessarily going to happen.

If the result is not a shareholder derivative action, as I suggest, but a fine, as you suggest, that doesn't necessarily mean that the fine happens immediately, that the plants begin to shut down immediately. You would not deny the possibility that there could be a compliance schedule worked out which would both protect the jobs and allow the companies to come into compliance, or would you?

Ms. Petrauskas. Senator, I've been told that it's very dumb for witnesses to argue with Senators about what the intent of Congress is. Having said that, I have to say that my understanding and indeed my recollection of what was being considered by the Congress when this legislation was enacted was, they did not want manufacturers to be free to say, shall I pay the penalty on the one hand or make the investment in order to make my products more fuel efficient on the other, and then make a simple dollars and cents economic judgment. My understanding was that Congress did not intend us to have that freedom.

What was perhaps not considered was that we would find ourselves in the situation where the expenditures have been made, the technology has been invested in, the capacity for small cars has been put in place, but for reasons beyond the manufacturer's control the standard isn't being met. Nonetheless, the "unlawful conduct" provision remains in the books.

It is different than some of the evironmental statutes, which anticipate a stretch-out of some sort.

Senator **Rockefeller**. I know you wanted to say something, Dr. Whitman, but I wanted to ask one more quick question of Ms. Petrauskas, and this is a blunt question. It has been suggested—and I assume that you would deny it—that one of the reasons for the lateness of all of this, that is the petition, is that with the type of ideology and attitude about regulation which we heard in the panel previous to your own, that it was felt that it would be a fairly safe bet that General Motors and Ford could go ahead in this manner and then be bailed out by nonregulatory action by the Reagan administration.

That was not what you were counting on, was it?

Ms. **Petrauskas**. Absolutely not. As I indicated, our hope was that we would be able to formulate a reasonable plan that would allow us to comply, so that we did not have to come down here and ask for relief. Unfortunately, that proved not to be the case, and its for that reason that we petitioned for relief for the 1986 through the 1989 model years.

Senator **Rockefeller**. Mr. Chairman, my time is up.

Senator **Nickles**. Thank you, Senator Rockefeller.

Senator Evans.

Senator EVANS. Thank you, Mr. Chairman. I am sorry, I was busy trying to get a line item veto and I had to step outside for a few moments.

Dr. Whitman, did you hear my line of questioning of the previous panel in terms of so-called market forces? I believe that your statement said:

> Since our last Congressional testimony on fuel economy, it has become clear that the fuel economy standards are no longer consistent with the world energy situation, nor do the standards fit today's competitive environment.

Does that competitive environment include what you would consider just the choice of consumers looking toward larger cars, or is there in your view any impact of the deliberate line of advertising you take?

Dr. WHITMAN. The competitive environment, sir, is composed of a large number of factors: what the consumer wants, what our competition is doing, what the Government regulatory environment is like, not specifically only with respect to the issue we are talking about today but a wide variety of other things.

In response to the question about advertising, it is our general feeling that the most successful advertising, in fact, in the end, the only successful advertising, is that which manages to respond to what the consumer is interested in and is concerned about; and that if you try to aim your advertising to try to lead the consumer in a direction that he does not want to go or is not interested in, you're not going to succeed.

Senator EVANS. You do not think that any advertising tends to encourage consumers to move in one direction or another?

Dr. WHITMAN. It may. But as I say, I think one is most successful when one can divine or figure out what it is that concerns the consumer and respond to that.

Senator EVANS. Isn't there a considerable interest as far as the automobile manufacturers are concerned in selling larger automobiles with larger profit margins and with more and more equipment added to them?

Dr. WHITMAN. Sir, we are committed to being a full-line manufacturer, which means that we intend to make and sell and make a profit on all the cars, cars in all areas of the lineup. And of course our biggest investment commitment going forward, the Saturn Corporation, is precisely to make it competitive and profitable at the small end of the market.

Senator EVANS. You say that the fuel economy standards are no longer consistent with the world energy situation. By that you mean that the world energy situation is so good we do not need them any more?

Dr. WHITMAN. I mean, sir, simply that at the moment the price of gasoline is such and the availability is such that the nature of consumer demand is very different from what was anticipated. That doesn't mean at all, of course, that one can be complacent about the future, that one can assume that present conditions will continue forever. That is not at all implied.

I do believe that there is less vulnerability now than there was 10 years ago. But of course, one still has to be concerned about both the possibility of some short-term disruption and of course the long-term concerns about finding ultimately effective substitutes for petroleum-based fuels. And we're doing that and we continue to be concerned and to spend money to find these alternatives. I don't think we're complacent at all.

Senator EVANS. It seems to me that you would agree that it takes considerable lead time to make continued advances in automobile efficiencies and in higher gasoline efficiency, isn't that correct?

Dr. WHITMAN. Oh, sure. It's an ongoing process.

Senator EVANS. If that's true, then today's apparent surpluses don't have much to do with what may happen in the future. Wouldn't it be much more appropriate to review some of the current predictions for the future, predictions just yesterday or the day before, that seriously reduce the potential for oil recovery in the United States, other predictions, all of which are tending toward the potential of energy shortages, not surpluses?

Dr. WHITMAN. Our belief, sir, is that the difference in the standard between 27.5 and 26, which would have at best a very marginal impact on U.S. fuel consumption, is not an effective way to go about providing for the future.

Senator EVANS. If you go to 33 or 34 it would have a big effect.

Dr. WHITMAN. Well, that's not at all clear, because one of the things, of course, that happens if you try to force the system faster than it can go or the consumer is willing to follow is that, if the products they want are not available, they simply hang onto their old cars. And the fuel efficiency difference between an old car and a new car is much bigger than the fuel efficiency differences between a new small car and a new large car.

Senator EVANS. I understand.

Dr. WHITMAN. Furthermore, as I have said, there are plenty of foreign producers who could come in and fill that gap, and who have shown themselves very good at filling any gap that appears in the marketplace.

Senator EVANS. Ms. Petrauskas, let me ask you a question and then you may comment on whatever you would like. You say in your testimony you believe that projected technology improvements have been met and that economic impacts of not changing the standard could be severe. That sounds to me like Ford has done everything that is possible and you have no rabbits up your sleeve or no further technology that is going to continue advances.

Do you really mean that?

Ms. PETRAUSKAS. What that statement is intended to say is that, if we look at the technology we have put in place over the last 10 years, it more than matches the goals that were set up at the time NHTSA first reviewed fuel economy standards and, indeed, as compared to the projections that were made when the 1975 law was enacted.

Certainly it is our intention to go on and continue to invest in that technology. The very short point I wanted to add, if I may, Senator, is that today, for example, we have the capacity to build a million and a half four cylinder engines. That's about 500,000 more of those engines than we are able to sell today.

Nonetheless, we are keeping that capacity in place, the capacity to build our small cars, our Escort and our Lynx. We operate those plants on one shift, at about 80 percent capacity. That is what gives us confidence that, if there were to be a dramatic, unexpected turn-around in consumer demand and there would be a great demand for small cars, we would have the products that would be able to meet them, because with the products I have just described we have the capacity to produce the products that are among the best on the Government list of top fuel economy cars.

Senator EVANS. I see my time is up, Mr. Chairman. I have other questions for several of the witnesses.

Senator NICKLES. Thank you, Senator Evans.

Senator Metzenbaum, do you have any more or followup?

Senator METZENBAUM. Ms. Petrauskas, if you are so anxious to increase the production and sale of your smaller cars, why don't you buy full-page ads offering 8.8 percent financing on them?

Ms. PETRAUSKAS. We have. In fact, we have an 8.8 percent program on our Escort and Lynx. It's just that it hasn't quite gotten the attention from my colleague here that our Continental and Mark advertising did. And in fact, that program is on top of a Tempo and a Topaz program that was quite successful.

Senator METZENBAUM. Are those your small cars?

Ms. PETRAUSKAS. Yes, they're our subcompact and compact cars, yes, sir.

Senator METZENBAUM. Thank you.

Senator NICKLES. Senator Rockefeller.

Senator ROCKEFELLER. Thank you, Mr. Chairman.

I mentioned a moment ago, Mr. Miller, to Ms. Petrauskas this question of shareholder derivative actions and I noticed you almost leapt out of your seat, which causes me to want to ask you to put into the record whether you agree or not that the companies were they able to show that corporate profits are higher because of the actions of management with respect to large or larger cars for a company to stay in violation of the law instead of shutting down plants, that their success in such suits might be more reasonable. Do you agree with that?

Mr. MILLER. Well, included in the paper which we are submitting for the record here is a detailed legal consideration about the shareholder suit issue, and in summary it says that the business judgment rule that would apply gives the managements of the companies considerable latitude and freedom from risk of successful shareholder suit, regardless of which course they take.

But it's our view that they would be taking greater risk if they shut down factories and eliminated those profits than by taking the penalties.

Senator ROCKEFELLER. OK. Mr. Chairman, I'm going to, if I might indulge—this talk about large, larger cars is confusing to me. It's been said by several of the witnesses that consumer preferences have shifted towards larger cars and engines, and I don't know whether that means larger or large in the traditional sense, because the figures, which are in fact Department of Energy figures out of Oak Ridge National Laboratory, show that the market share for so-called large cars in 1984 are less than they were in 1980.

So I don't understand what is this great demand out there that you are using.

Ms. PETRAUSKAS. Senator, you're absolutely right, we're not returning to the kind of demand we may have seen in 1977. Really what we're saying is that the consumer demand for large cars is not falling as quickly as all of us, both in Government and in the industry, expected it to fall off.

If you make the comparison, for example, in 1977 I think our large car share was around 34 percent. Today our large car share is around 20 percent. Please do not hold me exactly to those numbers. My point only is that it is not a mammoth rolling back of the clock at all. It is simply saying that the demand is not falling off as quickly as we believed it would.

Senator ROCKEFELLER. Thank you, Mr. Chairman.

Senator NICKLES. Thank you very much, Senator.

Just a quick followup. Mr. Miller, you extolled some of the virtues of corporate average fuel economy. Do you favor increasing the rates?

Mr. MILLER. Well, what we favor is a sufficient lead time for us to make our plans. We suggest 5 years because that is about the planning horizon of the car companies. We are planning our 1990 models right now, and what we want from you more than anything is just to tell us what you want, what is the public policy that we should be trying to comply with, and then give us enough time to go off and do it.

But do not set up one policy and then come back in a couple of months before we go into production on the 1986 models and change the rules when we have made the commitments and the others have not.

Senator NICKLES. Let me ask you an additional question. You talked about fairness. Have any other auto manufacturers received loan guarantees from the Federal Government?

Mr. MILLER. We received loan guarantees, and for a lot of very good reasons, so that we could save about half a million American jobs and give us the time to repair our company. We paid that money back in record time. We paid it back with interest and we paid it with a $300 million tip on top of that, called stock warrants.

So, I am not ashamed at all about that assistance that we required.

Senator NICKLES. Did any other manufacturers receive that?

Mr. MILLER. Well, the——

Senator METZENBAUM. Continental Illinois Bank got $7.5 billion.

Senator NICKLES. Well, they do not make cars.

Senator METZENBAUM. It is the same money, same taxpayers' money. We did pretty well on their deal, better than we are doing on the Continental Illinois deal.

Mr. MILLER. The variety of ways in which the Government is involved in the plans for our industry is very complex.

Senator NICKLES. One final question and we need to move on. At least, I know that Senator Evans and I have a policy luncheon at 12:30 p.m. We also have another panel, so I will ask just a quick question.

For each of our panelists, you or your board or your chairman, are you opposed to the action lifting the import restrictions?

Ms. PETRAUSKAS. Yes; we are.

Senator NICKLES. You are opposed to it. So you favor continuation of the restrictions?

Ms. PETRAUSKAS. We did and we do so.

Dr. WHITMAN. Our position was that the voluntary restraint agreement, or the U.S. Government's support of it, should not be continued, because we believe that ultimately the only salvation and health of the American industry is to be competitive, and that is what we are working very hard to do.

Senator NICKLES. Mr. Miller?

Mr. MILLER. Well, we were on record as favoring the continuation of the restraints until the rest of our trade policy on currency values and taxes could be straightened out. The rules have been changed and we are changing.

Senator NICKLES. Have you changed your position?

Mr. MILLER. No; we are changing our company's strategy. When you change your policies here, we have to change our strategies to comply. All we ask for is the lead time in which to do it sensibly.

Senator NICKLES. Thank you very much.

Senator Evans, we have one additional panel as well.

Senator EVANS. I understand. Just a couple of minutes.

Mr. Miller, I am struck by your concern about timing on the 1986 models and the relief, which in your case leaves you with a model mix that is intended to fully meet the standards which were established for 1986 and, as I understand your statement, then, less capable of meeting competition in other areas from General Motors and Ford if these standards were to be relaxed.

Is that essentially true?

Mr. MILLER. Well, it is hard to go back and reconstruct what we would have done if somebody had tapped us on the shoulder 5 years ago and said: Hey, don't worry about 27.5 miles per gallon; it is only going to be 26 miles per gallon when General Motors comes and asks for it.

Because we might have, for example, kept more V-8 capacity than we kept on the street. We probably now would have put in more capacity for our luxury car, which is our Fifth Avenue Edition. It is a V-8, rear wheel drive car. It is our least fuel efficient, but it is selling very well. But we constrained the capacity because we had an eye to the standards.

So we sacrificed profits. We made investments in higher technology, higher cost ways of getting the fuel efficiency. And now we get to where it is too late and we have been had. I would ask General Motors and Ford, if they do not have the capacity to meet the law in 1986, that is not a decision they made in the last 30 days. That decision had to have been made 2 years ago. They have just as long lead times in their companies as I do or longer.

Senator EVANS. I would like to know, both Dr. Whitman and Ms. Petrauskas, if you believe that it is fair at this point, 3 or 4 months before the commencement of the 1986 model year, to change the rules for that year? Does that create the potential at least of unfair competition?

Ms. PETRAUSKAS. I do not believe that it does.

Senator EVANS. Why not?

Ms. PETRAUSKAS. Because we have put the capacity in place to meet the law. The statement that my colleague made was in error.

The capacity is in place, the technology investments have been made. We have done everything that would have allowed us to meet the law, but for a change in consumer demand.

Dr. **Whitman**. Again, it is the change in consumer demand that has created this situation as the primary factor in it, and that is a matter which changes, as I say, every day and every week.

We are complying with the law. We are complying with the provisions under the rules of how such petitions should be made, and we are asking for the response which is fully provided for under the law.

Senator **Evans**. What I do not understand is how consumer demand can only hit two out of three companies and not the third one.

Dr. **Whitman**. Because the third one is not a full-line producer, and made that decision not to be a full-line producer some time ago.

Senator **Evans**. Well, they made that decision in line with fully trying to implement the standards, the fuel efficiency standards that we set up.

Dr. **Whitman**. I do not believe, Senator, that the intention of the law was to eliminate full-line producers or to make it impossible for them to function as such.

Mr. **Miller**. I resent the notion that we are not a full-line producer. We offer something for everybody. Our luxury car happens to be a bit smaller than the one General Motors puts out, but it is a luxury car that's called the Fifth Avenue.

The point on the capacity is, if my two colleagues here are saying that they have the capacity to meet the law in 1986, then why don't they just get on with the job of marketing to the consumer the mix of vehicles that will meet the law? That is what we accept as our assignment, to sell the proper mix and not to put 8.8 percent financing on the highest fuel consuming vehicles.

Senator **Nickles**. Thank you, Senator Evans.

And to our panelists, we thank you for your interest and cooperation. I am sure there will be some additional questions, and we would appreciate your written response to those as well.

Senator **Metzenbaum**. Mr. Chairman, before this panel leaves, I'd like to make it clear—I'd like to make two things clear. One is, I don't think the national interest is necessarily served by collecting a fine. I think those of us who are concerned about this issue are less interested in the money of General Motors or Ford than we are in energy conservation.

And if General Motors and Ford can come up with some approach which would assure even greater conservation as the price of waiving the fine, I would have far less difficulty with it. This argument that General Motors and Ford are making, that it has to do with comsumers' demand, is totally contrary to the facts according to impartial sources. A Society of Automotive Engineers' publication indicates that "consumers shifting to smaller cars did not improve new car mpg very much, and their more recent shift to larger cars has not reversed new car mpg very much either."

"In short, the majority of consumers have stayed with the same size mix of new cars throughout the 1978 to 1984 periods."

I just don't agree with what General Motors is saying, I don't agree with what Ford is saying. But I'm not really interested in seeing if we can collect their fines. I'd like them to figure out a way that we can save and conserve more energy in this country than we presently do, and that is the part where I believe the irresponsibility issue comes into play.

Senator **Nickles**. Thank you, Senator Metzenbaum.

Our next panel is: Professor Robert Leone from the John F. Kennedy School of Government at Harvard; Clarence Ditlow, Director of the Center for Auto Safety; Ms. Joan Claybrook, President of Public Citizen; and Mr. Norris McDonald, Director of Energy Conservation and Transportation Project of the Environmental Policy Institute.

Senator **Metzenbaum**. Would any of the panel members feel it an imposition to limit their remarks to 3 minutes? Can you get by, Professor?

Mr. **Leone**. I would attempt to do so.

Senator **Nickles**. We would ask all panelists, if it would be possible, to summarize your comments. We will enter your comments in full in the record. I know that a few of the Senators have time conflicts, and that is unfortunate. But we do look forward to your testimony and your statements.

Professor Leone, if you would begin.

STATEMENT OF PROF. ROBERT A. LEONE, JOHN F. KENNEDY SCHOOL OF GOVERNMENT, HARVARD UNIVERSITY, ON BEHALF OF THE AUTOMOBILE IMPORTERS OF AMERICA, INC.

Mr. **Leone**. Mr. Chairman, members of the committee, my name is Bob Leone and I am a lecturer in public policy at the John F. Kennedy School of Government at Harvard. I am also an affiliate of the School's Center for Energy and Environmental Policy where I conduct research on the economic impact of energy and environmental policies on American business.

I'm here at the request of the Automobile Importers of America to present the preliminary findings of a study I'm now conducting on the impact of changes in CAFE standards. I would like to summarize for you three key preliminary findings to date.

My first key point is simply that, as we once again review the CAFE program, we must not lose sight of the fact that this Nation has made dramatic advances in achieving its fuel economy goals during the past 10 years. Pessimists who, 10 years ago, thought that the American people would not conserve gasoline were wrong.

In 1985, this Nation has achieved a level of fuel economy with $1.13 gasoline that we once thought might require gasoline priced at $2 per gallon or higher. This past success is a forerunner of future success. We have already set in motion at least 10 years of improved fuel economy for the Nation's automobile fleet, as old cars are replaced with new, fuel efficient vehicles.

Even our failures today, if I might use that term, are the result of our successes. Today and in the coming year or two, some manufacturers may not meet the 27.5 miles per gallon standard. This has not happened because auto manufacturers failed to respond to the CAFE challenge. Quite the opposite, the technological improvement in fuel efficiency has been so great in the past 10 years that, despite gasoline prices today 46 percent higher than in 1973, the energy cost to drive a mile in a new car is approximately 22 percent lower today than in 1973.

That is why consumers are purchasing roomier and higher performance vehicles. When a manufacturer falls short of a CAFE standard because technological advances have actually reduced the energy cost to drive a mile, I must concede that that is the kind of "failure" I like to see.

My second key point is that CAFE standards are not merely instruments of economic regulation; they are also a statement of this nation's commitment to rational energy use. If CAFE standards are to serve both purposes, the policy challenge is to avoid standards so weak that they undermine the nation's commitment to energy conservation and standards so stringent that they are economically wasteful, unfair, and counterproductive.

And let there be no mistake about it—excessively stringent standards are wasteful, unfair, and counterproductive. I'd like to cite just two examples. My first example involves a growing family which needs the carrying capacity of a traditional station wagon. This station wagon might get 26 miles per gallon.

But instead of purchasing the station wagon, the family is encouraged to purchase a van which gets only 23 miles to the gallon. The station wagon violates the standard for automobiles, but the lower mileage van exceeds the standard for trucks.

My second example involves a consumer trying to choose between a Saab and an Audi. The purchaser of a Saab 900 Turbo at 19.2 miles per gallon could easily pay several hundred dollars if Saab violated an excessively stringent standard. Yet the purchaser of an Audi 5000S Turbo at 18.9 might pay no price premium at all, despite purchasing a lower gas mileage car.

Why? Because Saab is a limited product line company, but Audi has Volkswagen in its corporate family to keep its corporate average above the standard.

Simply put, excessive regulatory stringency is unfair to consumers by limiting choice, unfair to producers by diverting sales from one company to another, and likely to be counterproductive from the standpoint of energy conservation.

This leads to my third and final point: We have achieved our tremendous successes in advancing fuel economy in the past 10 years by doing three things: First, we have allowed consumers the right to exercise their freedom to choose the vehicles they want most; second, we have encouraged automakers to compete on the basis of fuel efficiency; and third, we have set regulatory standards stringent enough to reinforce this Nation's commitment to energy conservation, but not so stringent as to encourage wasteful, unfair, or counterproductive actions.

In a complex world of consumer decisionmaking, competitive interaction, and regulatory administration, I submit to you that a 25 miles per gallon standard—by virtue of the fact that it will not dampen new car sales, will protect consumer choice, will prevent uneconomic diversion of sales from one company to another, and will not trigger wateful and unproductive actions—is a better way to advance this nation's fuel efficiency goals.

[The prepared statement of Mr. Leone follows:]

STATEMENT OF ROBERT LEONE

SUMMARY OF CONCLUSIONS

1. The nation has achieved the automotive fuel-efficiency goals Congress established in 1975. As evidence of our success:

   - Domestic automakers have improved fuel efficiency by 92 percent since 1974.

   - Despite gasoline prices 46 percent higher today than in 1973, the energy cost to drive a new car one mile has actually fallen 22 percent due to dramatic technological advances in fuel efficiency.

   - 10 future years of improved fuel efficiency are now in place as new fuel efficient cars replace, old, inefficient models.

2. The nation has achieved these goals by:

   - allowing consumers to exercise their freedom to choose the vehicles they want most,
   - encouraging automakers to compete on the basis of fuel efficiency, and
   - setting regulatory standards stringent enough to confirm the nation's commitment to energy conservation without triggering wasteful, unfair and counterproductive consequences.

3. The lesson of this past success is that a standard of 26.0 mpg may well be superior to a standard of 27.5 mpg in meeting the nation's fuel-efficiency goals fairly and efficiently because a 26.0 mpg standard tends to

   - protect consumer choice,
   - allow competition on the basis of fuel economy without causing uneconomic diversion of sales from one producer to another, and
   - avoid wasteful, unfair, and counterproductive actions that dampen new car sales and cost jobs.

Statement of Professor Robert A. Leone
on
Automotive Fuel Economy Standards
before the
Energy Regulation and Conservation Subcommittee
of the Energy and Natural Resources Committee
of the United States Senate
May 14, 1985

At the Request of
The Automobile Importers of America (AIA)

Good morning. My name is Robert Leone. I am with the John F. Kennedy School of Government of Harvard University. I am also an affiliate of the school's Center for Energy and Environmental Policy, where for many years I have studied the economic impact of energy and environmental policy on American business. In addition, I am a principal in Putnam, Hayes & Bartlett, a major economic consulting firm in Cambridge, Massachusetts.

I appreciate the opportunity to appear before you. The Automobile Importers of America recently asked me to analyze the effect of a reduction in the Corporate Average Fuel Economy (CAFE) standards on the public, the economy and on the nation's fuel-efficiency objectives. My study will be made available to this Committee upon its completion.

When this hearing was announced on April 25, the AIA asked me to appear before this Committee and present my preliminary findings, and I am pleased to do so.

Congress's Goals in 1975

In 1975, Congress adopted corporate average fuel economy (CAFE) standards as one part of a national effort to deal with the energy crisis. These standards served three distinct purposes. First, they advanced fuel economy objectives without resorting to immediate energy price decontrol. Second, they encouraged energy-saving improvements in automotive technology. Third, mandatory CAFE standards confirmed this nation's commitment to the rational use of energy resources.

We Have Achieved Our Goals of Conserving Energy, Reducing Dependence on OPEC and Increasing Fuel Efficiency

As we once again review the CAFE policy, we should not lose sight of the dramatic advances this nation has made in achieving its national energy goals during the past 10 years.

- Pessimists who 10 years ago thought that the American people would not conserve energy were wrong.
    - In 1984, United States petroleum consumption per constant dollar of Gross National Product was 32 percent lower than it was in 1973[1].
    - In 1985, the nation has achieved a level of fuel economy with $1.13 per gallon gasoline [2] that we once thought might require $2 per gallon gasoline.
- The United States is much less vulnerable to an oil shock today than it was 10 years ago, not merely because we are less dependent on OPEC for our oil supplies, but because we have taken conscious actions to increase our ability to respond to an emergency.

-- By October of this year, the Strategic Petroleum Reserve will contain 489 million barrels of oil. This is equivalent to approximately 110 days of 1984 net petroleum imports [3]. In 1975, we had no Strategic Reserve [4].

-- By 1982, we had approximately 20 million more compact or smaller cars in our automotive fleet than we did in 1973. Such cars now constitute about 40 percent of all vehicles [5]. These fuel-efficient cars substantially improve our capacity to respond to an oil emergency.

-- By 1982, we drove 6 million fewer full-size cars than we did in 1973, and full-size cars have declined from approximately 42 percent of the fleet to 30 percent of the fleet [6]. And those full-size cars we do drive achieve levels of fuel efficiency much higher than those we drove in the 1970s.

-- Today domestic auto producers have in place or under construction enough production capacity to build more than four million small cars annually [7]. In 1973, the nation confronted an oil disruption with limited capacity to manufacture high-mileage vehicles.

- The pace of technological change in the auto industry today is rapid.
  - -- We have already set in motion at least 10 future years of improved fuel economy for the nation's automobile fleet as older cars are replaced with new fuel-efficient vehicles.
  - -- This technological improvement has been so great that despite gasoline prices today 46 percent higher than in 1973, the energy cost to drive a mile in a new car (on a sales-weighted average basis) is approximately 22 percent lower today than in 1973 [8].

Now We Should Base Our Approach on Past Experience and Today's Needs

From the perspective of an economist, there are persuasive arguments against CAFE standards altogether. After all, gasoline prices in 1985 are decontrolled and a principal purpose of the original standards was to protect consumers and the economy from the consequences of immediate energy price decontrol.

Furthermore, whatever doubt there may have been in 1975 as to the responsiveness of consumers and manufacturers to changing gasoline prices, there is no doubt in 1985: when gasoline prices go up, consumers buy more fuel-efficient small cars and when gasoline prices go down, they buy fewer fuel-efficient small cars. This requires manufacturers to pay more attention to fuel efficiency than ever before, for if gasoline prices resume their long-term upward rise -- as forecasters predict -- consumers will demand high-mileage vehicles no matter what the standards require. From a strictly economic perspective, gasoline prices by themselves could achieve the nation's fuel-economy goals without regulatory intervention.

But as important and effective as prices are as an economic means to achieving the nation's fuel-economy goals, a narrow economic perspective on CAFE standards may be incomplete. CAFE standards are not merely instruments of economic regulation; they are also a statement of the nation's broader continuing commitment to rational and socially responsible energy use.

Furthermore, today's policy challenges are more subtle and complicated than in 1975. For instance:

- Energy security today increasingly depends on international actions. While the United States has dramatically reduced its dependence on OPEC oil, the fact remains that 59 percent of world crude reserves are in OPEC countries [9]. But CAFE standards -- just as with any other use-specific regulatory standard -- tend to be limited in their ability to cut energy consumption levels in an effective and efficient manner. Furthermore, they have little effect on the dependence of other countries on OPEC oil.
- The vulnerability threat today is still real, but unlike 1975, the danger is not an immediate supply disruption.
- The technological challenge today is also different. Because the easy steps have been taken, future success

will require a more sustained, long-term effort to improve fuel economy and create new fuel sources, not a preoccupation with meeting short-run regulatory criteria.

If CAFE standards are intended to serve both as a statement of purpose and as a means of regulation, the policy challenge is to avoid both standards so weak that they effectively undermine the nation's commitment to rational energy use and standards so stringent that they are economically wasteful, unfair, and counterproductive.

Excessively Stringent Standards Are Unfair and Counterproductive

- Excessively stringent standards increase the prices and limit the choices of vehicles consumers want to buy.
    - To meet excessively stringent standards, producers must either increase prices to stifle demand for some models or limit consumer choice. Either way, this means unsatisfied consumers.
- Excessively stringent standards artificially change the mix of cars available to consumers by diverting sales from model to model, car to truck and producer to producer.
    - Consider a growing family which needs the carrying capacity of a traditional station wagon. The station wagon might get 26 mpg, but due to excessively stringent standards, could easily be priced $500 higher than otherwise as the manufacturer

attempts to stifle demand. Instead of purchasing the station wagon, the family might be encouraged to purchase a van which might get only 23 mpg [10]. The van, however, would have no price penalty because it would be classified as a truck at a lower CAFE requirement level.

- Excessively stringent standards dampen auto sales and encourage old, fuel-inefficient cars to be kept on the road longer, undermining both economic and fuel-efficient goals.
  - Every time a consumer keeps an old full-size car on the road longer because excessively stringent standards make new full-size cars more expensive than they would otherwise be, three things happen. The measured fuel economy of the new car fleet rises, actual fuel economy of the total on-the-road fleet declines, and jobs are lost.
- Excessively stringent standards penalize individual producers with limited product lines.
  - Saab and Audi compete in similar markets. A customer who purchases a Saab 900 Turbo at 19.2 mpg could easily pay several hundred dollars extra if Saab does not meet an excessively stringent CAFE standard. Another customer who purchases an Audi 5000S Turbo at 18.9 mpg might pay no price premium at all, despite purchasing a car with lower gas mileage. Why? Because Saab is a limited

product-line company, but Audi has Volkswagen in its corporate family to keep its corporate average above the standard [11].

- Excessively stringent standards penalize individual producers who have made great advances in fuel efficiency.
  - Domestic automakers will pay the lion's share of any fines that result from excessively stringent standards, yet domestic auto producers have improved fuel efficiency by 92 percent since 1974 [12].

All of the above examples are distressing consequences of excessively stringent standards. They are distressing because each case results in an *increase* in measured compliance, but a *decrease* or no change in the actual on-the-road fuel efficiency of the nation's automobile fleet.

Simply put, excess regulatory stringency is always wasteful and often counterproductive.

A 26.0 mpg Standard May Well be Better Than a 27.5 Standard

The best regulatory requirement is one which meets the criteria for a standard strong enough to matter, but not so stringent as to trigger wasteful, unfair, and counterproductive responses. Given the complexity of consumer decision-making, a competitive interaction and regulatory administration, a 26.0 mpg standard may well be better than a 27.5 mpg standard, because it tends to --

- protect consumer choice.
- prevent uneconomic diversion of one producer to another.
- not dampen new car sales.
- not trigger wasteful and counterproductive actions.

Most importantly, the new car fleet as a whole is still likely to meet or exceed the 27.5 mpg standard soon. Even if individual manufacturers are allowed to meet a standard of 26.0 mpg, enough producers will be above the standard to bring the overall new car fleet into compliance and actual on-the-road fuel economy will continue to improve.

In summary, we have achieved our goals of conserving energy, reducing dependence on OPEC and increasing fuel efficiency. We should continue our national committment to fuel conservation in a constructive and sophisticated way based on past experience and today's needs. This commitment should be fair to consumers, fair to producers, and achieve the nation's fuel-economy objectives. A 26.0 mpg standard may well be more productive than a 27.5 mpg standard in meeting these needs.

Thank you very much.

REFERENCES

[1] Annual Energy Review, 1983, Table 3, p. 9, and Monthly Energy Review, December 1984, p. 9.

[2] Monthly Energy Review, January 1985, p. 92.

[3] Statement of Danny J. Boggs, Deputy Secretary, U.S. Department of Energy, before the Committee on Energy and Natural Resources, U.S. Senate, 1 May 1985, p. 3.

[4] Monthly Energy Review, January 1985, p. 41.

[5] The vehicle mix in 1982 was taken directly from Table 2.2 in Oak Ridge National Laboratory's 1984 Transportation Energy Data Book (Edition 7). The vehicle mix in 1973 was derived by applying automobile survival rates as reported in Table 2.8 of the above-mentioned data book to new car registrations as reported in Wards Automotive Yearbook [1957-1973]. In both analyses (1973 and 1982) it was assumed that all vehicles are scrapped at the same rate, regardless of size.

[6] Same as [5].

[7] The U.S. Automobile Industry, 1983, Report to the Congress from the Secretary of Commerce, December 1984, pp. 97-105.

[8] Gasoline Prices (average for all types): 38.8¢/gallon in 1973 (82¢/gallon in $1984) versus $1.198/gallon in 1984. From Monthly Energy Review, January 1985, p. 92, and Annual Energy Review, 1983, Table 62. Using sales-weighted mpg averages of 14.2 mpg in 1973 and 26.6 in 1984 from the Transportation Energy Data Book (see [5]), p. 2-28), in 1973 the energy cost to drive one mile was 5.8¢ (in $1984) whereas in 1984 the energy cost was 4.5¢/mile.

[9] National Petroleum News Factbook, 1983, vol. 75, no. 7A, p. 70.

[10] From the 1985 Gas Mileage Guide, EPA Fuel Economy Estimates, October 1984 (DOE/CE-0019/4), p. 7 and 10. For example, a Chevrolet Celebrity Wagon rated at 23 mpg city/32 mpg highway for an average of 26 mpg versus a Chevrolet S-10 Blazer rated at 21 mpg city/26 mpg highway with an average of 23 mpg. (These averages are based on the harmonic mean of city and highway driving weighted by 55 and 45 percent, respectively.)

[11] See [9], p. 5. For example, a Saab 900 Turbo (18 mpg city/21 mpg highway) with an average of 19.2 versus an Audi 5000S Turbo (17 mpg city/22 mpg highway) with an average of 18.9 mpg.

[12] Comments of Automobile Importers of America, Inc. Regarding Fuel Economy Standards for Model Year 1986 and Beyond, NHTSA Docket No. FE 84-02; Notice 1, Exhibit A.

Senator NICKLES. Thank you, Professor. And I am going to ask all of the panelists if you will try to please stay within our 3-minute guideline, so we can have some Senators here, because we are going to have to leave shortly.

Mr. Ditlow.

STATEMENT OF CLARENCE M. DITLOW III, DIRECTOR, CENTER FOR AUTO SAFETY

Mr. DITLOW. Senator Nickles, I will just focus in on two points. First of all, the issue is not small cars, it is not a shift in mix; it is what big cars GM and Ford are selling today, because the biggest single factor in both Ford and GM being below 27.5 miles per gallon is that they chose to retain outmoded, old-fashioned big cars.

The difference in fuel economy for GM is about 2 miles per gallon and for Ford about 1.4 miles per gallon. The reason why they kept these cars has nothing to do with consumer demand. It has to do with profits. These cars are virtual cash cows. The tooling investment has long since been written off and they are making at least an additional $1,500 per car profit.

If these cars were replaced by the cars that GM planned to put into production in 1983, 1984, and 1985, they would not have any shift in sales, they would have no loss in jobs. And there is no better example of that than what happened in 1977 when GM first sold a downsized large car. They chopped 1,000 pounds out of the car.

Ford did not. Ford kept on selling what they called the last of the whoppers. And what happened in sales? GM beat the socks off Ford, with their sales going up by 68 percent from 333,000 to 561,000 for their large car, and Ford almost staying the same, going only from 240,000 to 260,000.

So in other words, you can sell big cars, you can keep jobs, and you can meet fuel economy standards at the same time.

Finally, as a veteran of the wars which saw Congress passing the Clean Air Act and the original Energy Policy Conservation Act, I can say with certainty that penalties are in the nature of fines. They are not mandatory standards in the sense that manufacturers have to meet them.

When the Act was passed, there was consideration given to the fact that the emissions standards were mandatory. If you did not meet the emissions standards, you paid a $10,000 per vehicle fine. It was called a nuclear deterrent, and Congress did not want to do the same thing for EPCA, so they imposed a $50 per mile per gallon penalty.

In 1980, based on a Congressional Budget Office study showing that the penalty was getting too cheap in terms of getting the manufacturers to put better technology on, Congress gave NHTSA the authority to raise the penalty from $50 to $100.

I have an answer for the manufacturers. If they are really concerned about whether or not they have a liability, whether or not this act is mandatory, then why don't they ask the Department of Transportation for an advisory opinion? They ask for advisory opinions by the hundreds, but they have not asked for an advisory opinion on this, because the answer would go against what they are saying.

Then finally, I would like to suggest that maybe what the manufacturers should do, if they are so concerned about the type of penalty that is in this law, is to suggest to Congress that, instead of relaxing the standard from 27.5 to 26 miles per gallon, simply change the wording of the law, clarify it once and for all that it is, indeed, just an economic penalty, and decriminalize the fuel economy law, have a NORML II, National Organization for the Reform of the Mileage Laws. I think that would go a long way toward taking care of the only valid expressed concern that I heard here today from the manufacturers.

And I think the real issue is, as we have explained in our own petition before the U.S. Department of Transportation, not whether we should go back to 26 miles per gallon, but whether we should go beyond 27.5 miles per gallon, because 27.5 miles per gallon is not giong to be enough when 1990 rolls around. We would like to see higher standards or we are not going to get fuel economy and conservation that we need in the future.

Thank you.

[The prepared statement of Mr. Ditlow follows:]

STATEMENT OF CLARENCE M. DITLOW III
DIRECTOR, CENTER FOR AUTO SAFETY
Before the
SUBCOMMITTEE ON ENERGY REGULATION AND CONSERVATION
of the
SENATE COMMITTEE ON ENERGY AND NATURAL RESOURCES
Washington, D.C., May 14, 1985

Mr. Chairman and members of the Subcommittee, thank you for the opportunity to testify on the automobile fuel efficiency program and the Corporate Average Fuel Economy (CAFE) standards established under the Energy Policy and Conservation Act of 1975. The Center for Auto Safety is a non-profit organization founded by Consumer's Union and Ralph Nader in 1970 but now independent of both. The Center has worked primarily on consumer issues pertaining to motor vehicles, including fuel economy and safety.

The motor vehicle fuel economy standards mandated by Congress in the Energy Policy and Conservation Act (EPCA) represent the most significant energy conservation program in this country. The express purpose of the fuel economy program was to reduce the U.S. vulnerability to foreign events by improving vehicle fuel efficiency over 1974 levels by 50% by 1980, and 100% -- to 27.5 MPG -- by 1985. The EPCA fuel economy standards were intended to reduce U.S. oil consumption by 3 million barrels of oil per day by 1985.[1]

Although there is a shortfall between the mileage new cars actually get on the road and the CAFE standards, there can be little doubt that the Congressionally-mandated fuel economy standards are a spectacular success that should be encouraged rather that dropped. When the National Highway Traffic Safety Administration (NHTSA) produced its last detailed annual fuel economy report in 1981, the agency estimated that in 1980 alone the mileage standards reduced foreign oil imports by $3 billion.

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[1] H.R. Rep. No. 94-340, 95th Congs., 1st Sess. 86 (1975).

Purchasers of a 1985 car would save $3,300 in gasoline costs due to the mileage standards.

On a broader level, the CAFE standards have advanced major national policies. These include enhanced national security through reduced dependence on imported oil; significantly reduced fuel consumption; improved U.S. balance of trade and balance of payments resulting from reduced oil imports; reduced inflationary pressure; lessened dependence of the U.S. economy on foreign petroleum supplies; and stimulation of substantial innovation in automotive design and production technology. There can be little doubt that the CAFE standards, by decreasing demand for petroleum, have helped break OPEC's ability to fix high oil prices.

Despite the dramatic benefits of the CAFE standards, NHTSA has slashed the program to the point that its ability to further the national interest is in doubt. These actions include:

- Slashing the light-truck fuel economy standards;
- Decimating NHTSA's fuel economy program to the point where it can no longer monitor fuel economy and the need to improve fuel economy;
- Reducing the information required from the auto industry which was used to set standards and ensure compliance;
- Terminating the original post-1985 fuel economy rulemaking; and
- Conducting the penalty assessment for 1984 CAFE standards behind closed doors.

Post-1985 CAFE Standards

The NHTSA has done a complete about face on post-1985 CAFE standards, going from supporting more stringent gas mileage standards beyond 1985 to moving toward weakening the 27.5 MPG standard. Yet the very reasons NHTSA cited in 1981 to increase the 27.5 MPG standard are even stronger today than they were then.

Recognizing the need of the nation to further conserve energy through improved fuel economy, NHTSA issued an advance notice of proposed rulemaking (ANPRM) on the need for post-1985 CAFE standards higher than 27.5 MPG. In an accompanying study entitled Analysis of Post-1985 Fuel Economy, NHTSA concluded that "we must turn to federal new car energy conservation requirements for the post-1985 period . . . to mitigate continuing dependency on foreign oil."[2] Rejecting arguments for reliance on the market, the report advised:

> [T]he issue is not whether consumer demand will produce some level of increased fuel economy after 1985. The issue is, absent federal standards to set a floor on new vehicle fuel performance, will the market demand be stable and strong enough, and will industry response be timely and adequate, to assure that this country minimizes its reliance on imported oil.[3]

Market demand depends upon public perception of the energy situation, which may not reflect the reality of the energy supply in this country. The agency illustrated this by reminding that consumers continued to purchase large cars even after the 1973-1974 Arab oil embargo. NHTSA advised:

> If there is a misjudgment, if the consumer does not demand, and the auto industry does not offer, the best performance on fuel economy, the consequences are severe indeed. Today, there is the danger of being lulled into a state of complacency . . . . The underlying issue is this country's vulnerability in the face of the uncertain energy future, which may include further severe and unexpected disruptions in foreign oil supplies, and the extent of risk and severity of consequences if wrong guesses are made about consumers' and manufacturers' future demands and response to automotive fuel efficiency.[4]

NHTSA's fundamental finding was that:

> It comes down to an issue of lead time. The leadtime requirements of the industry in commercializing the technology of greater fuel efficiency is about 5 years. Looking to the post-1985 period, although the technology is available to produce fuel economy levels consistent with the national interest, there is always

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[2] Analysis, at p. I-2.

[3] Id. at I-8.

[4] Id. at I-2.

> the chance that other factors will divert market demand and manufacturer plans from this goal. If this occurs, and the Federal government must step in at some later date with fuel economy requirements, the country will find itself in a particularly vulnerable state until the new technologies can be brought into production.[5]

Viewed as a whole, the initial post-1985 rulemaking notice recognized that substantial improvements in fuel economy were needed and that the major question was how to obtain them. Despite the conclusions in it analysis, NHTSA terminated the rulemaking on April 16, 1981 -- eleven days before the comment closing date. None of the questions identified by the agency only three months before as essential to sound decision-making for the post-1985 era were purported by the agency to be resolved, with one glaring exception. The termination notice announced that "market pressures are adequate" to meet the national interest in curbing petroleum use and petroleum imports. This conclusion was wholly unsupported by any material or reasoning cited in the withdrawal notice, and indeed was directly contradicted by the only reasoned evaluation prepared by the agency of feasible fuel economy improvement after 1985, the "Analysis of Post-1985 Fuel Economy."

Elimination of Reporting Requirements

On February 19, 1982 NHTSA confirmed its intent to further blind itself to manufacturers' fuel economy intentions, by deleting whole categories of information which manufacturers are required to report to the agency. NHTSA proposed to and later did eliminate all reporting of running technology and sales changes as well as the marketing efforts manufacturers expect to use to improve average fuel economy. Until then, NHTSA had deemed it important to receive this information on a semi-annual basis. NHTSA's explanation for the move underscores its intent to leave fuel economy improvement to the marketplace alone: the utility of the information had been "solely to assist the agency in passenger automobile standard-setting," and is no longer useful because the agency plans not to pursue fuel economy standards beyond 1985.[6]

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[5] Id. at I-2.

Light Trucks

On October 16, 1984 NHTSA relaxed the 1985 model year CAFE standard for trucks by 1.5 MPG to 19.5 and set a reduced standard for 1986 trucks of 20.0 MPG. The belated relaxation for 1985 models, which we believe to be illegal since it was done after the beginning of the model year, was done only to relieve GM and Ford of paying penalties. After giving short shrift to the "need of the nation to conserve energy" in two paragraphs, NHTSA devoted most of its decision to explaining that changed market demand caused by falling gasoline prices had led to consumers buying bigger trucks or trucks with bigger engines and a resultant drop in fuel efficiency.

NHTSA's relaxation of light truck fuel economy standards based on market demand for less fuel efficient trucks stands the purpose and mandates of the Energy Policy and Conservation Act on their heads. The very reason behind this Act requiring mileage standards for cars and trucks was that the market did not demand vehicles fuel efficient enough to meet the need of the nation to conserve energy. The Act intended fuel economy standards to lead the market rather than have the market lead fuel economy standards, as NHTSA would have it.

NHTSA totally failed to consider the overall energy conservation impact of relaxing light truck fuel economy standards on overall gasoline consumption. Sales of light trucks have increased constantly in recent years, from 17.9% of new vehicle sales in 1978 to 21.4% in 1983. These trucks are substituted for passenger cars which have higher fuel economy. In fact, the auto companies advertise trucks as substitutes for passenger cars. Thus, the increased market share of light trucks represents a decline in the overall fuel economy of the new passenger vehicle fleet.

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[6] 47 Fed. Reg. 7706 (1982).

On December 11, 1980 NHTSA itself determined that a light truck fuel economy standard of 21.0 MPG was technically feasible for the 1985 model year. In its attempted relaxation of the 1985 standards, NHTSA does not contest that basic finding in terms of the availability of technology to meet the original standard. Instead, it purports to find that market demand has changed so that consumers will buy less efficient trucks than projected and lowers the standard by the amount due to changed demand which is 1.5 MPG.

Such an adjustment for changed market conditions is not part of technical feasibility within the meaning or the intent of the statute. NHTSA simply cannot arbitrarily make up an adjustment to the standards that Congress specifically ruled out. Nor can the adjustment be sustained on grounds of economic practicability. Although NHTSA expounds at great length about economic consequences and loss of sales and jobs if the standards are not relaxed, there is no basis for NHTSA allegations. A difference of 1.5 MPG for a manufacturer who fails to meet a standard is simply a penalty of $75 per vehicle. No one has ever shown that a price difference on $75 per vehicle will mean a decline in sales, particularly on vehicles that cost $10,000 or more -- as do the less fuel efficient trucks. Testimony before the House Energy and Commerce Committee on July 21, 1983 indicated that consumers were not even deterred by price increases of $200-300 in buying a new vehicle.

Post-1985 CAFE Standards Should Be Increased

For the reasons set forth above and by others today, the 27.5 MPG standard for cars should be increased, not decreased. The reasons given by the auto companies are lame excuses designed to obscure the fact that the 27.5 MPG standard can be attained and surpassed by the use of technology and models deferred by the manufacturers to maximize short-term profits at the expense of long-term profits and the economic health of the nation.

Rather than being a result of consumer demand for fuel inefficient cars, GM and Ford are below the 27.5 MPG standard because of their own marketing decisions.

1. Retention of Old Models

The biggest single factor in Ford and GM being below 27.5 MPG today for 1985 rather than achieving the 31.0 and 29.0 MPG they originally projected is the retention of the old rear wheel drive models introduced in the mid-1970's and deferral of plans to replace them with more fuel efficient front-wheel drive cars of the same size. GM's 1985 CAFE was reduced by 1.7 MPG for keeping in production cars such as the Caprice, Chevette, and Malibu. Ford suffered a 1.0 MPG decrease because it kept producing outdated models such as the LTD and Crown Victoria. GM and Ford kept selling these cars not because of consumer demand but because of larger per unit profits than if they were replaced by newer models. The tooling and other investment costs have long since been recovered on these models with GM and Ford keeping more of the sales price as retained profits. Indeed, these models are virtual cash cows with average per unit profits up an estimated $1500.

If these cars were replaced by more fuel efficient front wheel drive models, there would be no loss in sales, no loss in jobs, and no shutting down of production as so direly and falsely predicted by Ford and GM. If anything, there would be an increase in sales as consumers would find the new models more attractive and efficient than the older models.

This fact was clearly proven in 1977 when GM downsized its large cars and Ford did not. In 1977, GM chopped nearly a thousand pounds out of its big cars while Ford continued to sell and advertise its large cars as the last of the big cars. Despite Ford's larger size, both cars had about the same interior space but the GM cars were 13 to 35% more fuel efficient than the comparable Fords. What happened in the marketplace--the downsized, more fuel efficient GM cars beat the socks off the Fords. As seen below, Chevy outsold Ford by more than 2 to 1 in 1977 with an increase in demand for its slim big cars of 68% compared to 9.8% for Ford. Manufacturers don't lose sales when they bring out new downsized models. They didn't in 1977 and they wouldn't in 1985.

Model	1976 Sales	1977 Sales	Increase
Full-size Chevrolets	333,976	561,658	68%
Full-size Ford	238,974	262,405	9.8%

2. Retention of Old Technology

A closely related factor is the failure of Ford and GM to use available "new" technology. By failing to put fuel injection in its models as planned, Ford's 1985 CAFE was reduced by 0.36 MPG while GM's was reduced by 0.30 when it restricted the availability of overdrive. When these factors are combined with the retention of old models, GM would have had a 1985 CAFE of 27.4 MPG while Ford would have hit 27.0. Carryback and carry-forward credits would have more than taken care of this modest miss rather than the larger ones caused by their conscious corporate decisions.

3. The Demise of the Diesel

In GM's case, their 1985 CAFE was further reduced by 1.37 MPG due to decreased diesel sales. While GM blames this on increased diesel fuel costs, nothing could be further from the truth. Simply put, GM killed the diesel by producing the lemon of the century when it converted the 350 CID gasoline engine into a diesel rather than designing a diesel from the ground up. The GM diesel has done more for grass roots consumer organizing than anything since Ralph Nader with anti-GM diesel groups springing up around the country. The Center itself has received more complaints on the GM diesel than it can count. (We stopped counting at 10,000. Most other defects and lemons have trouble breaking a 1,000.)

4. Manufacturers Secretly Tell NHTSA More Than 27.5 MPG Beyond 1985

At the same time the manufacturers are asking for a rollback of the post-1985 CAFE standards, they are applying for carryback credits from these same model years for exceeding the 27.5 MPG standard. Yet all of this is being done in secret. And no wonder--how do you justify rolling back the standards on one hand and project beating the standards on the other hand?

5. Act Is Not Mandatory

GM and Ford premise their relaxation argument on the CAFE standards being mandatory when in fact they are not. EPCA specifically envisioned companies failing to meet standards due to marketing decisions and imposing economic fines related to the cost of improving fuel efficiency ($50 per MPG) and not a deterrent such as the $10,000 per vehicle fine in the Clean Air Act for failing to meet emission standards. There was such concern that the $50 penalty was cheaper than the cost of introducing new technology that EPCA was later amended to give NHTSA the authority to raise the penalty to $100.

Thus a manufacturer could choose to not equip its cars with technology that could improve fuel efficiency by 2 MPG but would cost $100 per vehicle. In order not to give the company a competitive advantage, EPCA would impose a $100 penalty. The situation with Chrysler versus Ford and GM is exactly analogous--Chrysler has paid the price to make its cars more fuel efficient while GM and Ford have chosen to avoid that cost. To relax the 27.5 MPG standard would be to give GM and Ford the precise type of competitive advantage that EPCA intended to avoid.

Senator NICKLES. Thank you.

Ms. Claybrook.

STATEMENT OF JOAN CLAYBROOK, PRESIDENT, PUBLIC CITIZEN

Ms. CLAYBROOK. Yes, Mr. Chairman. I am the president of Public Citizen and the former Administrator of the NHTSA.

I would like to say first of all that this program for fuel economy is in disarray. First, it is in disarray because the manufacturers have asked the NHTSA to rule on contradictory petitions, one as to the carryback petitions and second as to the amount of the standard. And there is no way that the agency can legitimately rule on both of them favorably to the auto manufacturers.

Indeed, I would like to submit for the record a memorandum that Mr. DeMuth wrote from OMB in 1983 indicating that, with Chrysler meeting the standards, that there was not the legal capacity in the agency to find maximum feasible fuel economy was not being met by Ford and General Motors under the law appropriately. So that is my first point.

Second, the companies have said that this is beyond their control and that it is really not correct. In 1977 the Department of Transportation produced a fuel efficient car by taking a 1977 Chevrolet and cutting out a lot of weight, and had it beat the 1985 standard of 27.5 miles per gallon. And I would like to submit for the record the documents on that.

So essentially, they took a six-passenger, large-sized, family car made in 1977 and they just cut out unnecessary weight and had it meet the 1985 standard. So there is no reason why the companies, indeed, cannot meet the 1985 standard.

Finally, with regard to subsidies, an issue that was raised, I would like to say that the ITC found just several months ago that there has been about $15 billion in additional income to the manufacturers because of the import quota during the last 3 years that they would not have otherwise received. So they have certainly had the cash flow to meet the standards.

With regard to the NHTSA, this program has been completely disbanded. All of the research, $7 million a year, was stopped 2 years ago. There is no research now going on in NHTSA in this program. The staff of some 40 people has been cut down, first to 3 people, and now it manages to be 6.

The information-gathering materials that they got from the industry on a semiannual basis have been cut out. There was a deregulation program justified on the basis that the market was handling the matter, so the agency no longer has either research bases or actual information from the companies on a regular basis to make any analysis of the companies' capability to meet the standards.

And in addition to that, they have not asked the companies until very recently for any information on an ad hoc basis. So the agency itself is almost totally incompetent to handle the task they now face of analyzing the capacity of the manufacturers on a technical basis and to justify their ability to meet, or not to meet, these standards, because the agency itself has been desecrated.

I would like to say that the standards have been very valuable for consumers. They have saved the average consumer, according to the Department of Transportation, $1,700 over the life of a 1980 car, because of the law. That was before the standards with the law. And for 1985 model cars it is probably closer to $2,500 over the life of the car, just in fuel savings and fuel costs. So it has been a very, very valuable program.

Finally, with regard to affecting the market, not only is there the issue of the advertising by the companies, but right now they have a program to suggest to consumers that not meeting these standards, the fuel economy standards, is not disadvantageous, because if they were met they would not be able to buy a wide range of cars.

There is an advertising program currently under way. I would like to suggest the committtee get that information for the record.

In addition, the fuel economy booklets that the Department of Energy and the Department of Transportation are responsible for having available to consumers and the dealerships are no longer readily available. They are not distributed on time and they're not kept up to date.

Thank you very much.

[The prepared statement of Ms. Claybrook follows:]

Testimony of
JOAN CLAYBROOK
PRESIDENT, PUBLIC CITIZEN
on
AUTOMOBILE FUEL ECONOMY STANDARDS

Mr. Chairman and members of the Committee, my name is Joan Claybrook. I am President of Public Citizen -- a private, non-profit public interest organization that does research, education, litigation and advocacy on public policy issues. I was Administrator of the National Highway Traffic Safety Administration and was responsible for administering the federal motor vehicle fuel economy program from April of 1977 to January of 1981.

Mr. Chairman, I want to make several points in my testimony. They are:

1) The CAFE standards were adopted to save billions of gallons of gasoline, reduce the nation's vulnerability to oil shocks, and address the inadequacies of the free market as it affects fuel economy improvements. These reasons are still valid today.

2) The CAFE standards have worked effectively. They have significantly increased fuel economy in cars and trucks sold in this country, saving the nation and consumers billions of dollars.

3) Ford Motor Company and General Motors Corporation had the

ability and opportunity to meet the 1983 through 1985 passenger auto CAFE standards. Chrysler Corporation, despite near bankruptcy, has met the standards through sensible product planning and technological implementation.

4) Ford and General Motors have taken two contradictory tracks in attempting to avoid paying hundreds of millions of dollars in penalties. On the one hand they have asked for a rollback of the passenger auto CAFE standards for 1985 and subsequent model years, arguing they can't meet the standards; and on the other hand they have requested "carry- back credits" to apply against penalties otherwise due for model years 1984 and 1985, arguing they will exceed the existing standards during model years 1986 through 1988.

5) NHTSA has destroyed its capacity to effectively analyze the petitions recently filed for rolling back the passenger automobile CAFE standards.

6) NHTSA has sharply reduced the amount of fuel economy information it collects and has crippled its and the public's ability to analyze it.

THE REASONS FOR WHICH THE CAFE STANDARDS WERE ADOPTED STILL EXIST.

When Congress first adopted automobile fuel economy standards in 1975, the effect of the 1973 Arab Oil Embargo was fresh in our minds. It was relatively easy to understand why standards were important to our country's security and economic well being. But now, with the most recent oil supply disruption six years behind us, it is harder for many of us to appreciate the need for improved automobile fuel economy. However, the reasons for improving auto fuel economy are as valid today as they were in 1975.

One of the reasons we adopted CAFE standards was our high level of oil imports. While the Administration points at statistics showing a sharp decline in OPEC oil imports and the Strategic Petroleum Reserve as evidence that we are not nearly as vulnerable to oil supply disruptions as we were in 1975, there are other facts to consider which make it clear that our economy is still highly vulnerable to oil supply perturbations.

First, the current level of oil imports to the U.S., including that from non-OPEC sources, has only fallen a moderate amount since 1975, from a little over 6 MMB/D to 5.4 MMB/D in 1984 -- an 11% decline (1). But far more important, our imports are expected to rise substantially over the next fifteen years. DOE projects imports will rise by as much as 2.5 MMB/D by 1995 (2).

Second, because of an agreement with the signatory nations of the International Energy Agency, we are obligated to share our oil supplies with them in the event of a significant oil supply shortfall.

And third, and perhaps most important, our oil supplies come from a free market. If an oil supply shortfall were to occur anywhere in the world, or if the world oil market were to tighten substantially, which most analysts regard as inevitable, world oil prices would soar. (In fact, DOE has projected that oil prices will go over $45 per barrel by 1995. (3)) And since the U.S. is part of that market, we would not be insulated from that soaring price. In other words, despite the fact that our oil imports now come from more diverse sources, and despite the fact that we have a 100-plus day supply of oil in the Strategic Petroleum Reserve, we are still economically vulnerable to world oil supply short falls and the effect they have on world oil prices.

A second reason for adopting CAFE standards that hasn't changed since 1975 is that automobiles consume a great deal of oil and represent an enormous conservation potential.

New car fuel efficiency has gone up substantially since

1975, from 14.7 miles per gallon (mpg) in 1975 to today's 26 mpg (4). But the average fuel economy of all cars on the road has only increased from 13.5 mpg in 1975 to 16.7 mpg in 1983 because there are so many old, inefficient cars still in use (5). The combination of the slow rise in average fuel economy of cars on the road and a small increase in the number of vehicle miles travelled has meant that total motor gasoline consumption (and total energy consumption) for transportation was the same in 1983 as it was in 1975 (6).

Not only has the actual amount of petroleum used for transportation remained high, the percentage of total oil consumption in our country devoted to transportation has grown steadily, from 54% in 1975 to 62% in 1984 (7). Our petroleum use is thus becoming increasingly concentrated in the transportation sector, and unlike other sectors that have ample opportunity to switch from petroleum to other sources of fuel, such opportunity is very limited in the transportation sector. Our conservation efforts in transportation have therefore become even more important.

In addition to the fact that our oil supplies were vulnerable in 1975 and that automobiles used a great deal of oil at the time, another reason that Congress initially set CAFE standards is because Congress did not want to rely solely on market forces to increase fuel economy. Market forces were not sufficient to provide a steady increase in automobile fuel economy. That, too, hasn't changed.

As we are all aware, the real price of gasoline has been falling since 1981. The price signal being sent to consumers, and through them to manufacturers, is therefore one that discourages conservation and investment in fuel efficiency. In fact, the sale of gas guzzling V-8 engines is going up; they accounted for 28% of sales in 1984 (8). And consumers are now buying the same size-mix of cars they did before the last oil crisis (9). Indeed, the market with respect to fuel economy is far more responsive to short-term market conditions, namely the present glut of oil supply, than it is to long-term or geopolitical conditions. Making this situation unacceptable is that cars being sold now will be operating, on average, for the next ten years, well into the period during which energy analysts expect oil supplies to tighten and prices to rise.

But even if fuel prices were high, it is unlikely that the market alone will push fuel economies much beyond the levels mandated by the 1985 passenger auto CAFE standard. Figure 1 demonstrates that as fuel economy is improved above 30 mpg, the resulting fuel cost savings are roughly offset by the costs of improving fuel economy. The figure shows this to be true even if the price of gasoline were to be double the 1981 price of gas (10).

THE STANDARDS HAVE WORKED

Determining what portion of automobile fuel economy improvement over the last decade has been due to CAFE standards and what portion has been due to market forces is difficult at best, but some recent analysis by K.G. Duleep of Energy and Environmental Analysis, Inc. indicates that CAFE standards may have been responsible for the introduction of GM's X-Body in mid-1979, its J-Body in mid-1981 and its A-Body in 1982. Duleep has also concluded that there is strong evidence that Ford's introduction of its Escort in 1981 and its Tempo/Topaz in mid-1983 were in response to CAFE standards (11).

In its 1981 report to Congress, NHTSA concluded the standards had (12):

* saved the average buyer of a 1980 car over $1700 compared to the 1976 buyer because of reduced fuel costs;

* reduced the fuel consumption of passenger cars and light trucks to create cumulative fuel savings by the year 2000 of about 16 billion barrels of fuel;

* contributed to the stabilization of the dollar and reduction in the inflation rate (imported oil cost the U.S. $5.6 billion in 1972 and $100 billion in 1981);

* enhanced our national security by lessening our growing dependence on imported oil -- a dependence which greatly affects foreign as well as domestic economic policy;

* loosened the OPEC hammerlock on oil supplies and prices;

* provided stable planning targets for manufacturers and pushed them to move quickly to compete with imported vehicles;

* stimulated substantial innovation in automotive design and production technology.

To claim that the standards have not worked to increase fuel economy, and that the fuel economy increases thus far are completely the consequence of market pressures is even refuted by industry spokesmen. On October 30, 1977, while appearing on NBC's Meet the Press, Henry Ford said,

> "...we wouldn't have the kinds of safety built into automobiles that we have had unless there had been a federal law. We wouldn't have had the fuel economy unless there had been a federal law; and there wouldn't have been the emission controls unless there had been a

federal law."

In August of 1978 Stuart Frey, Chief Vehicle Engineer of the Car Engineering Group, Ford Motor Co., said, in reference to the fuel economy program,

> "...let me say that the task ahead is the kind that an engineer relishes, because it puts a premium on ingenuity and creativity. I believe I speak for all of my colleagues in the industry when I say I'm delighted to be part of the action."

FORD AND GM COULD HAVE MET THE CAFE STANDARDS.

The Congress first adopted the CAFE standards because they were impatient with the rate at which market forces would cause a rise in the fuel economy of cars sold in the U.S. to rise. It was clear that our economy and national security were at stake. They adopted standards to force the development and use of technology that would improve automobile fuel efficiency. In other words, the CAFE standards were meant to be "technology forcing." Now we're hearing automobile manufacturers blame their failure to meet the standards on the very thing that Congress had decided not to rely on when it adopted CAFE standards: the market.

In 1980 GM projected that their 1985 CAFE would be 31 mpg, easily meeting the 1985 passenger auto standard of 27.5 mpg. Ford projected in 1981 that their 1985 CAFE would be 29 mpg. In 1984 GM revised its 1985 CAFE estimate to 25.4 mpg, and Ford revised its to 25.6. K.G. Duleep believes the reason for GM's shortfall is due in part to retaining old model lines with low fuel economy that GM had planned to phase-out earlier. He estimates the retention of these models will cost GM 1.7 mpg in their 1985 CAFE. Ford, too, held on to model lines that it had earlier planned to phase-out. Duleep estimates this decision will cost Ford .99 mpg in their 1985 CAFE. (13)

These decisions by Ford and GM to hold onto old, low-mileage models were a gamble. They were banking on sustained consumer demand for their higher fuel economy models to provide the margin needed to carry them over the standard. But they knew by 1983 that continuing to sell the low-mileage models might well jeopardize their ability to meet the standards. They made a lot of money with this strategy, saving on the investments in new technology and reaping big profits from their old large cars. But as they realized this strategy would not enable them to meet the standard, they continued to sell these old models, and banked instead on the government excusing them from penalties for failing to meet the standards.

But while Ford and GM expect to fall far short of the 1985 passenger automobile CAFE standard, Chrysler expects to meet it, despite its extreme financial difficulties in the late 1970's. And even though American auto companies received protection from the voluntary automobile import quota -- and according to the International Trade Commission collected an additional $15.7 billion from consumers because of it -- Ford and GM still failed to make the investment in fuel economy necessary to meet the standards.

This is not the first time the Congress has been asked to weaken the CAFE standards. The manufacturers opposed the passage of the law in 1975 and instead sought voluntary standards. In 1977 they opposed NHTSA's decision to require rapid increases in fuel economy in the early years of the law's effect and smaller increases later (the so-called "front loading" of the standards), and instead sought a steady or "straight-line" increase. And in 1979 they requested a rollback of the standard from NHTSA, but were refused.

Again in 1980 they sought to weaken the standards. They asked for and received a change in the law that allowed manufacturers to use "carry-forward" and "carry-back" credits for up to three years on either side of the current model year. These credits are used to reduce penalties that would otherwise be due the government for failing to meet the standards. The credits have been enormously valuable to manufacturers, enabling them to fall far behind the CAFE standards in recent years without having to pay any penalties. Between 1978 and 1983 Ford earned over $466 million in carry forward credits for its domestically produced cars and trucks to apply against penalties. (1984 credits and penalties have not yet been calculated by NHTSA.) In the same period GM earned about $1.3 billion in carry forward credits for its domestically produced cars and trucks.

Now the manufacturers want to weaken the standards again. They want to take advantage of current low gas prices and concurrent complacency toward energy problems so that they can be excused from having to pay hundreds of millions of dollars in penalties. But they shouldn't be excused for their failure to comply with the standards. Ford and GM knew the requirements of the law far in advance of its application. They could have complied with it. For proof, one has to look no further than the Chrysler Corporation.

FORD AND GM ARE CONTRADICTING THEMSELVES, ARGUING IN ONE FORUM THEY WILL EXCEED THE PASSENGER CAR STANDARD, AND IN ANOTHER THAT THEY CANNOT MEET IT.

The manufacturers are taking a contradictory approach in attempting to be excused from the penalties for failing to meet the passenger car standard. On the one hand, they have filed petitions with NHTSA, requesting a rollback of the passenger automobile CAFE standard for 1985 and subsequent years. They argue they can't possibly meet the standard during that period, that they might have to shut down plants, cease production of certain automobiles, and that achievement of the 27.5 mpg standard is not feasible in this decade.

On the other hand, they have filed documents with NHTSA describing how they will exceed the 27.5 mpg standard within the next three years, making them eligible for carry-back credits to be applied against their 1983 and 1984 penalties. Information in these documents has been declared confidential by NHTSA, making it unavailable to the public, so I am unable to tell the Committee how they plan to exceed the standards.

This two-track, contradictory strategy is so bold it reveals the manufacturers' underlying arrogance toward the law.

NHTSA HAS DESTROYED ITS CAPACITY TO EFFECTIVELY ANALYZE FUEL ECONOMY INFORMATION AND PROCEEDINGS.

From 1981 to 1983, the Reagan Administration devastated NHTSA,s information base on fuel economy:

* They eliminated virtually all automotive fuel economy research in NHTSA, which in 1981 was a $7 million program.

* The fuel economy research has been disbanded and the staff dismissed or dispersed.

* NHTSA's technical records that were not discarded have been sent to the Transportation Research Center in Boston, Massachusetts for storage.

* The marketing information records were transferred to the Deputy Assistant Secretary for Auto Industry Affairs in the Department of Commerce.

* There is no longer any data base or capability in NHTSA to analyze the industry's technological capabilities to improve fuel economy, to test new concepts or to assess the market.

* The automotive fuel economy rulemaking staff was cut from about 18 employees to 3 and the office was collapsed into a division called Market Incentives, which is otherwise primarily responsible for the motor vehicle crash testing program.

* NHTSA has the equivalent of one full-time staff member

assigned to handle program planning and evaluation, enforcement, and legal services.

- The detailed program plan prepared during the Carter Administration for monitoring the industry's progress in complying with the fuel economy standards has been ignored since early 1981.

By 1983, of the 27 full-time professional assigned to work on the fuel economy research, rulemaking and enforcement program, three remained in a full-time capacity. For their contributions, none of the staff was promoted, several were riffed, more than ten were downgraded, several retired early to avoid being downgraded or riffed, and several others left the agency for the same reasons. In addition, the chief of the fuel economy research office left the agency, and the top three rulemaking officials were transferred to safety programs, where they had modest prior experience. Today, the only fuel economy activity in NHTSA is carried out in the rulemaking office, which contains six professional staff, none of whom are recognized leaders in this field.

NHTSA HAS SHARPLY REDUCED THE AMOUNT OF FUEL ECONOMY INFORMATION IT COLLECTS.

In addition to gutting the agency's fuel economy research and staff resources, on August 12, 1982 the Reagan Administration drastically reduced the amount and type of information the automotive industry is required to submit to the agency on a regular basis concerning their progress in complying with the standards. The amended requirements do not require manufacturers:

> "to submit data on technology and sales changes from the preceding model year or changes during the current model year intended to increase fuel economy. No data will be required on marketing measures to be used to increase fuel economy. Also, manufacturers will be required to submit a variety of technical and sales data for each vehicle configuration only once rather than twice a year."

(14)

In removing the requirements for this information, the agency said that such standards-related information was "useful when the agency engaged in major fuel economy standard-setting procedures...", implying the information was no longer needed because no future standards would be issued. It argued the agency could always obtain necessary information as it has in earlier proceedings through questionnaires and special orders.

In 1982, consumer groups urged the agency not to cut back on the manufacturer reporting requirements because the agency needed the information to properly monitor manufacturing activities in producing and marketing fuel efficient vehicles. But the agency responded:

> "Marketing measure information was more useful in times when manufacturers might have needed to use such measures to raise their average fuel economy levels enough to comply with applicable fuel economy standards. In the current market situation, compliance with standards is typically assured by comfortable margins. Thus, marketing measures are targeted to problems associated with inventories of over-stocked vehicles. With regard to technological change information, this material is typically available to the agency in the trade press. It can also be derived from the configuration and model type data in many cases."

(15)

This statement was made in August 1982. Not only is it incorrect today, but there were strong hints in early 1982 that the market was shifting back toward larger cars.

NHTSA HAS ALREADY REVERSED THE TREND TOWARD IMPROVING LIGHT TRUCK FUEL ECONOMY.

In 1980 NHTSA issued standards for light trucks for each model year through 1985. In October 1984 NHTSA granted a request from Ford Motor Company to roll back the 1985 standard from 21 mpg to 19.5 mpg, which yields the absurd result that the 1985 standard is actually lower than the 20 mpg standard in effect for the 1984 model year. At the same time, NHTSA set the standard for the 1986 model year at 20 mpg.

NHTSA explained that its decision was based on "a continuing shift in consumer demand," i.e., increased demand for larger vehicles and engines. Public Citizen, along with three other consumer groups, recently challenged that decision in court. Our petition argues that NHTSA must set fuel economy standards based not on manufacturer's preference for building larger vehicles, but rather on the factors outlined in the ACT; technological feasibility; economic practicability, the effect of other standards on fuel economy; and the need of our country to conserve fuel. NHTSA should not be in the business of rewarding GM and Ford because they have opted for a gas-guzzler marketing strategy.

One final point on light truck standards. The Act requires NHTSA to set light truck fuel economy standards at least 18 months prior to the beginning of the model year. NHTSA failed to meet this standard for the 1986 model year, and it has also failed to issue a standard for the 1987 model year, which begins in less than 18 months. These deadlines are important and should be strictly enforced. If the agency fails to abide by Congress' timetable, its inaction gives the manufacturers another excuse to ask for fuel economy standards to be set below the highest feasible level, on the theory that NHTSA did not give them enough lead time to comply.

CONCLUSION

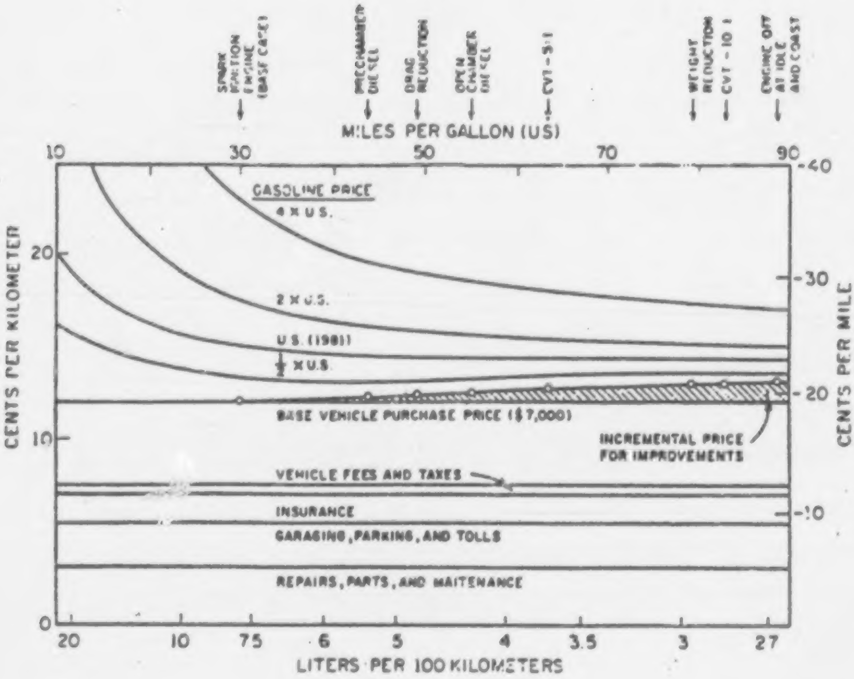
The CAFE standards have served our country well. Though we are still vulnerable to world oil supply disruptions, we would be much more vulnerable in the absence of the standards. In order to continue decreasing that vulnerability, which could lead to economic chaos as the oil shocks of the 1970's did, we must continue to reduce fuel consumption in automobiles, which consume a growing majority of the petroleum our country consumes.

To reverse the trend toward increasing fuel economy and excuse certain auto manufacturers of penalties they will incur for not obeying the law is unfair to manufacturers that have met the law; it rewards chance taking with important public laws; and it will set our country on a path of increasing fuel consumption and petroleum imports, setting us up for another oil-related economic upheaval.

Segments of the auto industry have already announced the start of a publicity campaign to convince Americans that enforcement of current fuel economy laws means restriction of consumer choice of vehicles. They call the campaign AutoChoice, and it is sure to dwell on consumers' present reduced concern for fuel economy, and attempt to convince them that improved fuel economy means consumer sacrifice -- which is patently untrue.

Congress should prevent NHTSA from rolling back the passenger automobile CAFE standard, which, as reflected by their recent rollback of the light truck CAFE standard, they are inclined to do. Ford and GM's two-track, contradictory attack on our fuel economy laws should be prevented -- they can't have their cake and eat it to -- lest they make a sham of the entire fuel economy program.

Figure 1



COST OF DRIVING (1981 U.S. CENTS)

The energy performance indicated here is based on computer simulations of modifications of the VW Rabbit (gasoline version) as the base case. The figure shows that the reduced operating costs associated with the various fuel economy improvements are roughly offset by the increased capital costs of these improvements, over a wide range of fuel economy improvements. For details see (11).

NOTES

1. Monthly Energy Review, Department of Energy, April 1985, pp. 42-43.
2. Energy Projections to the Year 2000, Department of Energy, October 1983, p. 5-12.
3. Ibid.
4. Energy Conservation Indicators 1983 Annual Report, Department of Energy, October 1984, p. 119.
5. Monthly Energy Review, p. 17.
6. Energy Conservation Indicators, p. 116.
7. Monthly Energy Review, pp. 7, 21.
8. MVMA Motor Vehicle Facts and Figures '84.
9. DOE Monthly Data Report # 18, Sept. 14, 1984.
10. Frank von Hippel and Barbara Levi, "Automotive Fuel Efficiency: the Opportunity and the Weakness of Existing Market Incentives," Resources and Conservation, vol. 10, pp.103-124, 1983.
11. K.G. Duleep, presentation at Transportation Research Board Annual Meeting, National Academy of Sciences, January 15, 1985.
12. Fifth Annual Report to Congress, Automotive Fuel Economy Program, Department of Transportation, January 1981, p. 63.
13. K.G. Duleep, Op. Cit..
14. Seventh Annual Report to Congress, Fuel Economy Program, Department of Transportation, January 1983.
15. Federal Register, Vol. 47, No. 156, August 12, 1982.

Senator NICKLES. Thank you very much, Ms. Claybrook.

It is necessary for myself—and I know Senator Evans just left—to excuse ourselves. Mr. McDonald, I apologize for that. I was trying to run through as quickly as possible. Senator Metzenbaum has been gracious enough to say that he would conclude the hearing, and so I thank you very much. Thank you.

STATEMENT OF NORRIS McDONALD, DIRECTOR, ENERGY CONSERVATION AND TRANSPORTATION PROJECT, ENVIRONMENTAL POLICY INSTITUTE, ACCOMPANIED BY ARNITA HANNON, DEPUTY DIRECTOR

Mr. McDONALD. Mr. Chairman and members of the subcommittee, I am Norris McDonald, director of the energy conservation and transportation project at the Environmental Policy Institute. I am joined today by the depupty director of the energy conservation and transportation project, Arnita Hannon, who is doing research on the economic and political implications of post-1985 fuel economy standards.

Senator METZENBAUM [presiding]. Mr. McDonald, I know what you have got to say is important, but it is not so important that you get to it so fast that none of us can hear what you are saying. Slow it down, my friend.

Mr. McDONALD. OK, great. I am glad you were able to say that, so I can slow this down and deliver it deliberately. Thank you, and Senator Rockefeller.

I would also like to add for the record that the Administrator of NHTSA, Diane K. Steed, mentioned that the Center for Auto Safety had petitioned to increase post-1985 fuel economy stnadards. The environmental policy institute also signed onto that petition to increase standards.

EPI strongly opposes reducing the corporate average fuel economy standards. EPI believes that a rollback of the federally mandated 1985 CAFE standards from 27.5 miles per gallon to 26 miles per gallon will:

One, excuse the failure of certain auto industries, or auto companies, to comply with the provisions of the Energy Policy and Conservation Act of 1975;

Two, weaken the focus of energy conservation in the transportation sector as a matter of national policy;

Three, increase automobile fuel consumption and promote U.S. dependence on oil imports;

And four, diminish or eliminate chances for the enactment of future Federal policies which will encourage steady progress in the production of fuel efficient vehicles by the domestic auto companies.

Domestic automobile manufacturers incorporated technology to improve fuel efficiency in small and large cars and exceeded CAFE standards between 1978 and 1982. Despite fluctuating consumer demand, the initiative of the manufacturers between 1978 and 1982 outweighed all other factors in contributing to the increases in sales-weighted fuel economy.

We maintain that the commitment exhibited by the domestic manufacturers during the 1978 through 1982 period should continue and all companies must adhere to their obligation under EPCA. The financial capability of the industry to sustain capital investment for improved automobile fuel economy is a facet of economic practicability which should be considered strongly by the National Highway Traffic Safety Administration.

The solid recovery of the automobile industry, beginning in 1983, substantiates its financial capability to withstand the needed capital investment to ensure the meeting of current and increased fuel economy standards. According to the Department of Commerce, in 1983 Chrysler, Ford, and GM experienced full year net profits for the first time since 1977. New car fuel economy declined in 1983, with Ford and GM missing the CAFE standards by 2.2 miles per gallon and 2.5 miles per gallon respectively.

With a 1983 domestic passenger car volume of 1.2 million, the Ford penalties were assessed by NHTSA to be $141.7 million, while the GM penalties, with a production volume of 3.5 million, were $438 million. Sufficient carryforward credits relieve these companies from penalty payments. It is projected that GM and Ford will also fall short of the 1984 standard by 2.7 miles per gallon and 1.7 miles per gallon respectively.

The rollback of the 1986 and subsequent years CAFE standards must not be allowed. The domestic automobile manufacturers have an obligation to comply with the law. The CAFE law is flexible to the extent that it gives auto manufacturers the right to exercise options to avoid the payment of penalties for failure to meet 1984 and 1985 CAFE standards through the use of carryforward and carryback credits.

EPI questions the choice of rollback petitions when both GM and Ford have also submitted carryback plans which, if approved by the Secretary of Transportation, must confirm their ability to exceed the 27.5-miles-per-gallon standard over the next 3 model years. These actions are contradictory.

Chrysler Corp. will meet the CAFE standards. Chrysler has invested over $4 billion to convert the majority of its passenger car fleet to fuel efficient four-cylinder, front-wheel-drive power trains. At the same time, the needs of the consumer were not compromised. Family size cars and others were available through Chrysler, and the incorporation of fuel economy improvements in all sizes was a major determinant in meeting the CAFE standards.

Senator METZENBAUM [presiding]. How much more do you have?

Mr. McDONALD. Just another paragraph or two.

Senator METZENBAUM. Go ahead.

Mr. McDONALD. In 1984 the United States used approximately 6 billion barrels of oil or 16 million barrels per day. Over 60 percent of this use is in the transportation sector. At the same time, domestic production levels are down to 8.8 million barrels per day. In fact, our current daily domestic production level is 2.5 million barrels below the 1970 peak year level of 11.3 million barrels per day.

Also I would like to add that last year our Nation faced an unprecedented $123 billion balance of trade deficit. This included $58 billion expended on imported oil.

Finally, it is unwise and contrary to the national interest to grant a rollback of the CAFE standards. Should a rollback be granted, we would urge the intervention of the Congress in overturning the decision immediately.

[The prepared statement of Mr. McDonald follows:]

ENVIRONMENTAL POLICY INSTITUTE

TESTIMONY OF

NORRIS McDONALD

DIRECTOR, ENERGY CONSERVATION AND TRANSPORTATION PROJECT

OF THE

ENVIRONMENTAL POLICY INSTITUTE

BEFORE THE

SUBCOMMITTEE ON ENERGY REGULATION AND CONSERVATION

OF THE

SENATE ENERGY AND NATURAL RESOURCES COMMITTEE

ON

AUTOMOBILE FUEL ECONOMY STANDARDS

MAY 14, 1985

Mr. Chairman, and Members of the Subcommittee, I am Norris McDonald, Director of the Energy Conservation and Transportation Project for the Environmental Policy Institute (EPI). EPI is a non-profit, public interest organization engaged in research, public education, litigation and lobbying. I commend the Subcommittee's sponsorship of the hearing today, and appreciate the opportunity to share the concerns of EPI on this matter of vital national interest.

Introduction

As the Committee is well aware, on March 1, 1985, General Motors, Ford, and the Automobile Importers of America (AIA) filed petitions with the US Department of Transportation, National Highway Traffic Safety Administration (DOT,NHTSA) to reduce the model year 1986 and subsequent years' Corporate Average Fuel Economy (CAFE) standard from 27.5 miles per gallon (mpg) to 26.0 mpg. EPI remains unalterably opposed to this action and submits that a rollback will: (1) dismiss the failure of certain auto companies to comply with the provisions of the Energy Policy and Conservation Act of 1975 (EPCA); (2) militate against a continued focus on energy conservation in transportation as a matter of national policy; (3) increase automobile fuel consumption, and consequently, promote US dependence on oil imports; and, (4) greatly diminish or eliminate chances for the enactment of future federal policies which will encourage steady and sustained progress in the production of fuel efficient vehicles by our domestic auto companies in the long-run.

The enactment of the Automobile Fuel Economy Standards in 1975, through a bipartisan effort of the US Congress, set US automakers on a steady and aggressive path to produce more fuel efficient vehicles. For the past ten years, with the standards, domestic automobile manufacturers have incorporated technology to improve the fuel efficiency of, not only its small cars, but large ones as well. The necessary capital investments were made between the years 1979 and 1983, and these efforts yielded substantial improvement in the fuel efficiency of the domestic fleets.

Manufacturer Initiative

It is important to note that, during those years when our domestic automobile industry exceeded CAFE standards consistently, capital expenditures of $51.3 billion, according to the US Department of Commerce, were concentrated predominantly in the United States. The Commerce Department's Report to the Congress, "The U.S. Automobile Industry, 1983," cited that, from 1979 - 1983, the nation witnessed significant improvements in domestic vehicles, including: an increase in U.S. small car production capacity from 1.4 million units in 1978 to 3.9 million units in 1983; improved drivetrains, and an increase in frontwheel drive transaxle production capacity from 1.2 million units (12 percent of total transmission production capacity) in 1978 to 3.6 million units (30 percent of capacity) in 1983; and an increase in 4-cylinder engine capacity from 9.5 percent of total engine production capacity in 1978 to 35.4 percent in 1983, and a corresponding reduction in V-8 capacity from 57.4 percent to 30.6 percent during the same period.

It is equally as important to note that, despite fluctuating consumer demand, the initiative of the manufacturers between 1979 and 1982, outweighed all other factors in contributing to the increases in sales-weighted fuel economies. Substantial mpg gains were noted in every size class from 1978 - 1982, with compact cars showing the greatest percentage gain (50.5%). In "Reasons for Changes in MPG Estimates, Model Year 1978 to the Present" (SAE Paper 840500) Philip D. Patterson, from the U.S. DOE, notes that these increases were due mainly to improvements in fuel economy within configurations (more efficient engines and transmissions). According to the study, MPG improvements in existing carlines were responsible for over half (56.7%) of the mpg rise between 1979 and 1982, while sales shifts to more efficient vehicles contributed less than 1/3 (26.7%). The introduction and discontinuation of carlines contributed approximately 16.6%. Manufacturers ensured that the broad transportation needs of the consumer were met while the national interest was protected through decreased gasoline consumption.

We maintain that the commitment exhibited by the domestic manufacturers during the 1978 through 1982 period should continue and all companies must adhere to their obligation under EPCA. Access to, and incorporation of technology do not present a formidable impediment to the improvement of automobile fuel efficiency by domestic manufacturers. We must now focus on the financial capability of the industry to undertake and sustain the capital investments necessary to improve in this area, particularly during the next decade.

Financial Capability

It is noted that the automobile industry was able to improve its automobile fuel efficiency levels significantly between 1978 and 1983, even in the face of economic uncertainties, and a recession during the years 1980 - 1982. The solid recovery of the industry, beginning in 1983, substantiates its financial capability to withstand the needed capital investment to ensure the meeting of current fuel economy standards and adhere to an increase in these levels during the next decade. According to the US Department of Commerce, in 1983, Ford, GM, and Chrysler experienced full year net profits for the first time since 1977; collective net income for these companies plus American Motors (AMC) increased to $6.15 billion during 1983, an increase of $5.85 billion from the $0.3 billion total profit recorded in 1982. The industry's total operating income was increased to $8.0 billion in 1983, and total interest on debt was reduced as the industry improved its operating strength, cash flow, and ability to repay borrowings. These positive trends continued through 1984, with the industry making record profits of $10 billion for that year ($4.5 billion for GM; $2.9 billion for Ford; and, $2.4 billion for Chrysler). Moreover, debt rating agencies have restored these companies to respectable levels and in both 1983 and 1984, GM, Ford, and Chrysler were in an improved financial state which enabled them to finance capital spending and plan aggressive capital spending programs for future years.

The financial capability of the industry to sustain the capital investment requirements associated with improved automobile fuel efficiency is a facet of economic practicability which must be considered strongly by NHTSA. Improvements in the financial health of the industry over the last two years should be measured relative to the ability of GM and Ford, in particular, to exercise the option of paying fuel economy standard penalties without substantial employment losses or product restrictions.

Fleet Trends

As is well known, the year 1983, brought a decline in new car MPG with Ford and GM missing the CAFE standards by 2.2 mpgs and 2.5 mpgs respectively. With a 1983 domestic passenger car volume of 1.2 million, the Ford penalties were assessed by NHTSA to be $141.7 million, while the GM penalties, with a production volume of 3.5 million, were $438 million. Sufficient carryforward credits relieved these companies of penalty payments. The dynamics of those variables which lead to the MPG decline reveal that sales shifts, which accounted for 68.9 percent of the 1983 loss, were a significant contributant. Contained within the

general sales shift to less fuel efficient vehicles was a shift among size classes which accounted for 75% of the total decline. Between the 1978 and 1982 period, the subcompact car share of sales had represented the largest gain (13.3 percentage points) while the large car size class had suffered a significant loss (09.7 share points). In 1983, the reverse happened: the subcompact car share fell by 4.4 percentage points (a 33.1% reverse from 1978-1982), and the large car regained 17.5% of its 1978-1982 loss. At the same time, however, existing carline changes had a negative impact on fuel efficiency.
This substantiates the presence of a number of 1983 new cars which had lower MPG levels than in the previous year. For example, the 1982 Chevette had an MPG level of 38.2, and a 1983 level of 33.2 or 5.0 mpg less; the Electra: 1982-22.0 mpg/ 1983-19.4 mpg, or 2.6 mpg less.

Credits and Penalties

For 1984, it is projected that GM and Ford will also fall short of the CAFE standard (27.0) by 2.7 mpg and 1.7 mpg respectively. Based on GM's production of 4.8 million, as reported by the December 31, 1984 Automotive News, for that year, penalties for failure to meet CAFE could be over $600 million.

For Ford, based on a production volume of 1.8 million, penalties will be approximately $153 million. Both companies have submitted carryback plans to NHTSA.

The Ford carryback plan (submitted to NHTSA on May 8, 1984) projected that its 1984 CAFE for passenger cars will be 25.4 mpg. This includes the assumption that the Environmental Protection Agency (EPA) will grant a uniform industry adjustment of 0.2 mpg for model years 1980-1985). With this projection, the shortfall would be 1.6 mpg, and the associated penalties, based on the 1.8 million production volume, would be $144 million. NHTSA granted partial approval to the Ford plan on July 31, 1984, pending a final decision in the EPA adjustment.

GM has also submitted a draft carryback plan (submitted November 27, 1984). This company requested, however, that NHTSA delay its final decision until the determination of EPA's disposition in the proposed 0.2 mpg adjustment, and the resolution of issues concerning the inclusion of GM-Toyota joint venture vehicles in GM's domestic fleet CAFE.

For 1985, GM and Ford have predicted that they will miss the 27.5 CAFE automobile standard by 2.4 mpg and 1.6 mpg respectively. Penalties could run in excess of $500 million for GM, and in excess of $150 million for Ford due to these shortfalls. Again, if the EPA uniform adjustment occurs, additional credits will be provided for these manufacturers which will aid in the offsetting of penalties.

1985 Fleet Trends

Based on the first six months data of the model year 1985, the Oak Ridge National Laboratory projects that the overall domestic average MPG will be 26.93, or a .61 MPG improvement over the 1984 model year. Projections show that, in the first six months of model year 1985, all sales shifts contributed .20 mpg or 25% of the overall MPG improvement, while manufacturer changes contributed .59 mpg or 73%. Again,the calculations suggest that, manufacturer contribution (configuration improvement, etc.) outweighed consumer influence in the overall fuel economy improvement of the various fleets. Sales shifts to more fuel efficient configurations did add .03 mpg to the overall improvement, however.

The first six month data for 1985 show that, within sales shifts, the greatest contribution to fuel efficiency improvement came between size classes (0.25 MPG versus a -0.11 MPG contribution in 1984). This suggests a consumer shift back to smaller cars. At the same time, the sales shift within size classes had a negative impact (0.09 MPG) on improved fuel economy; this indicates that, either, consumers did not seek fuel efficient vehicles when switching purchases within the same size class, or that, if they did search, more fuel efficient vehicles were not made available for purchasing. It is noted that, for the first six months of model year 1985, improvements within configurations accounted for a 0.01 MPG gain, and the introduction of more fuel efficient vehicles within configurations contributed 0.42 MPG. Manufacturers did not fare well in discontinuing fuel inefficient nameplates, as this action had a negative impact on MPG improvement (-0.06 MPG). Finally, it is apparent that, in the first six months of 1985, the discontinuation of fuel inefficient vehicles within configurations was emphasized less than in 1984 (in 1984, this action contributed 0.11 MPG to overall fuel economy improvement, while in 1985, this number decreased to 0.08).

From the calculations, it is noted that the actual MPG improvement from one year to the next (1984-1985) is at its lowest since 1978. The one exception, however, is the year 1983, when manufacturer initiative had a negative impact (-.16%) on fuel economy improvements, and in that year, new car fuel economy actually decreased by .23 MPG (-0.23). See below:

	MPG	MPG Change
1978	19.67	
1979	20.54	0.87
1980	23.11	2.56
1981	25.23	2.12
1982	26.36	1.14
1983	26.13	-0.23
1984*	26.32	0.19
1978-1984		6.65

*Based on a comparison of the first six months of model year 1984 to the first six months of model year 1983 (from: "An Analysis of Trends in Automotive Fuel Economy 1978-84," David L. Greene, Patricia S. Hu (Transportation Energy Groups, Oak Ridge National Laboratory) and Lynn Till (University of Tennessee))

It is most important to note the impact of variables other than immediate consumer response to gasoline price changes when assessing the industry's progress in fuel economy improvements. A sensitivity to other variables, such as improvements in continuing configurations, as well as national interest concerns are imperative in planning for advancements in this area. Automobile manufacturers need at least seven years to incorporate the necessary technology, and fully integrate new product lines or introduce improvements in existing car lines into the market. As such, the long-run decisions relative to fuel economy improvements must be guided by specific efficiency improvement targets, and accompanied by sufficient consumer incentives so that the market will sustain the production of more fuel efficient vehicles. We cannot limit our focus to a short-term reduction in domestic fleet fuel economy; we must exercise vision in looking to the long-run implications of a dangerous retreat from energy conservation in this nation's transportation sector.

The Rollback Proposal

The rollback of the 1986 and subsequent years' CAFE standards must not be allowed. The domestic automobile manufacturers had an obligation to comply with the law, and per the flexibility of the statute, have the right to exercise options to avoid the payment of penalties for failure to meet the 1984 and 1985 CAFE standards. The mechanism for the use of carrryforward and carryback credits provided in EPCA further solidifies the flexibility and sensitivity of the law to changing market conditions. EPI questions the choice of rollback petitions when both GM and Ford have also submitted carryback plans which, if approved by the Secretary of Transportation, must confirm their ability to exceed the 27.5 mpg standard over the next three model years. Admittedly, we are a bit puzzled by the contradictory nature of these actions.

One of the major domestic manufacturers, the Chrysler Corporation, has met, or exceeded the standards consistently for the last ten years, and this company will not fall short of the 1985 mandate. Chrysler has invested over $4 billion to convert the majority of its passenger car fleet to fuel efficient, four cylinder, front-wheel drive powertrains. At the same time, the needs of the consumer were not compromised. Family-size cars and others were available through Chrysler, and the incorporation of fuel economy improvements in all size classes was a major determinant in the meeting of CAFE standards. In 1984, according to EPA reports, mid-size sedans and station wagons represented about 70% of Chrysler's sales, while less than 30% of passenger cars were smaller than mid-size.

If we look at Ford, during the MY 1984 year, an Oak Ridge National Laboratory analysis cites that the company actally experienced a net increase of 0.58 mpg in the sales weighted fuel economy of its cars. The increase was due to: (1) sales shifts to more efficient size classes (0.26 mpg contribution); (2) improvements in continuing configurations (0.24 mpg contribution); and, (3) discontinuation of fuel inefficient configurations (0.05 mpg contribution). Sales shifts to more fuel inefficient vehicles within size classes caused a 0.22 mpg loss for Ford, while sales shifts to less fuel efficient configurations within a given nameplate caused a 0.11 mpg loss in the sales weighted fuel economy. On the other hand, Ford suffered a 0.10 mpg loss due to the introduction of nameplates with lower fuel economies than in the previous year (-0.10 mpg contribution in 1984 versus -0.16 mpg contribution in 1983).

Rolling back the CAFE standard to 26.0 mpg grants a competitive edge to both GM and Ford. Chrysler has invested substantially over the last ten years to ensure that its fleet would meet mandated standards. With a rollback, those companies which failed to comply can now move full steam ahead with the manufacture and sale of additional large cars, and gain greater profits.

Although there are many reservations concerning the rollback, our overriding concern must focus on the potential for increased automobile fuel consumption and a return to an unhealthy dependence on imported oil. The present day scenario of decreased gasoline prices at the pump, the disarray of OPEC, and the reduction of Middle East and OPEC imports to the United States is lulling the nation into a dangerous state of complacency. The federal government's role in energy conservation has diminished significantly with each year bringing less resources, and sharp cuts in programs in this area. Clearly, with respect to progress in the production of more energy efficient domestic automobiles, there is the greatest temptation to remove government regulation completely, and leave this area to market forces alone. A precipitous move to accomplish this retreat from energy conservation in the nation's transportation sector is contained in the current rollback efforts. The granting of the rollback will assure the public that this issue is no longer important.

A retreat from fuel economy standards will lead us right back to a level of vulnerability to politically unstable regions of the world which is unacceptable. With the CAFE standards in place, the nation has saved 1.8 billion barrels of oil, and reduced its dependence on imports, particularly from the Middle East. However, other factors must be considered, and the rosy picture presented by the present day energy scenario must also be viewed cautiously, particularly in terms of our domestic oil supply and demand.

Petroleum Consumption

In 1984, the United States used approximately six billion barrels of oil, or 16 million barrels per day. Over 60% of this usage is in the transportation sector. At the same time, domestic production levels are down to 8.8 million barrels per day. In fact, our current daily domestic production level is 2.5 million barrels below the 1970 peak year level of 11.3 mmb/d. Domestic drilling activities have certainly decreased. However, even during years of significant drilling and exploration (following 1979) as reported by the Office of Technology Assessment (OTA), the impact of higher oil prices in that period reduced demand, but did not increase supply. This suggests that, drilling took place in an increasing number of wells which produce progressively less oil. The OTA predicts that the downward trend in US oil production will continue, and production rates of 5 to 8 mmb/d by 1990 and 4 to 7 mmb/d by the year 2000 are estimated.

In addition to decreased domestic oil production, the nation is witnessing a major financial restructuring of the oil industry which has deemphasized drilling, production, exploration, refining, and marketing, and has focused instead on mergers, acquisitions, and the repurchasing of its own stock. As one analyst for the Wall Street firm of Prescott Ball and Turben phrased it recently, "The companies are acting rationally individually, but they're setting us up for another price trap by the Persian Gulf countries in the 1990's." We do not necessarily support this conclusion, however, we would suggest that there should be concern about our domestic production, and dwindling oil resources. However, the fact of the matter is that, if we are not increasing domestic oil production, there is certainly the possibility that our reliance on imports will begin an upward climb over the next decade.

Clearly, we do not want to see an increased reliance on foreign sources of oil, even from nations other than the Middle East. It is noted that Mexico has become the single largest supplier of oil to the United States (over 700 thousand barrels per day are imported from Mexico). Areas such as Mexico and Canada are indeed potential sources for increased US reliance, however, the strengthening of our own conservation efforts is the key to breaking this dependence, and protecting the national interest.

The stability of the United States' Strategic Petroleum Reserve (SPRO) must also be assessed relative to the ability of the United States to sustain itself in the face of an oil embargo. This assessment becomes particularly important with the actions of the domestic oil companies as the current Administration attempts to withdraw the federal commitment from the Reserve by eliminating daily fill requirements and ultimately turning the responsibility of SPRO financing and maintenance over to the private sector.

Currently, the Strategic Petroleum Reserve houses 430 million barrels of oil. Under present law, the daily fill rate requirement is 220,000 barrrels. The current level will sustain a loss of total oil imports to the US for approximately 90 days (assuming average daily import levels of 5.4 mmb/d). It is enough to sustain a total loss of OPEC imports for approximately 215 days (assuming average daily import level of 2.0 mmb/d), and a total non-OPEC loss for approximately 140 days (assuming average daily import level of 3.3 mmb/d)* (*Energy Information Administration, Oct., 1984, p. 42).

In reviewing our domestic production and the status of US oil reserves, one should logically conclude that the current 'non-crisis' period should be used to strengthen and reinforce those national policies which encourage energy conservation and the domestic production of fuel efficient vehicles to compete in the US and world market. Yet, these objectives will be almost impossible to meet if a rollback of the 1986 automobile fuel economy standard is granted.

The nation has saved 1.8 billion barrels of oil due to the enactment of EPCA. A continuation of this pattern of savings should be desirable, since even greater savings through reduced consumption, would result from an increase in the standards. The proposed rollback would have the opposite effect. The Congressional Research Service has reported that a fuel consumption increase will result if the rollback is granted. In fact, the CRS study, "Prospects of Non-Options and Assessment of Their Likelihood," concludes that, with the rollback, fuel consumption in this country could increase by approximately 100,000 barrels per day by 1990 for each five year period in which the 26.0 mpg standard prevails, and levels exceeding 200,000 barrels daily by the mid-1990's, under these same conditions.

Finally, as the Committee knows, last year, our nation faced an unprecedented $123 billion balance of trade deficit. This certainly was not helped by the $58 billion expended on imported oil. Nor was it helped by the US automobile trade deficit of $30 billion, $19 billion of which is with Japan alone. While we all share a commitment to fighting and reducing these glaring deficit levels, we must be mindful that the increased production of more fuel efficient, high quality vehicles domestically will reduce oil consumption and provide for the meeting of certain consumer transportation needs which have heretofore been met by Japanese automakers. This is a time when the consideration of increasing the fuel economy standards should be a top priority, and yet our time is being spent considering a reduction; the irony is overwhelming.

Conclusion

It is unwise and contrary to the national interest to grant a rollback of the 1986 and subsequent years' automobile fuel economy standard. Should a rollback be granted, we would urge the intervention of the Congress in overturning the decision immediately.

Senator METZENBAUM. Thank you very much, Mr. McDonald.

Professor Leone, whom do you represent?

Mr. LEONE. I was asked to appear here by the Automobile Importers of America.

Senator METZENBAUM. Would you tell me who the Auto Importers of America are? Does that include Rolls Royce, Jaguar? Is it Japanese manufacturers, German manufacturers? Who's in it?

Mr. LEONE. It includes all those that you named, with the exception of Volkswagen and Mercedes-Benz.

Senator METZENBAUM. So other than that, just about anyone who's importing cars?

Mr. LEONE. I believe it's 18 other importing car companies. Yes, that's correct.

Senator METZENBAUM. Now, if the U.S. industry were to stay at the 26 miles per gallon would that not be very helpful financially to those companies, Japanese manufacturers, who make cars that get substantially in excess of that mileage?

Would it not help them marketingwise? If you get 40 miles per gallon or 32 miles per gallon, it's better than a car that only gets 26 miles per gallon. So would that not be helpful to them in their marketing?

Mr. LEONE. Excuse me? You stated if the standard were at 26?

Senator METZENBAUM. Well, as you know, it is 27.5 miles per gallon. As I understood your testimony, you seem to be supporting the position of General Motors and Ford. Now, did I misunderstand you?

Mr. LEONE. I was supporting the position that a 26-miles-per-gallon standard is a more effective way of achieving this Nation's fuel economy objectives, yes, that's correct.

Senator METZENBAUM. Better and more efficient than going to 27.5?

Mr. LEONE. More efficient than going to 27.5 without taking complementary actions. The successes that we have had in the policy to date—and I think that we all have to be proud of the successes this Nation has achieved—in my judgment are a consequence of a balance between prices that consumers must pay for gasoline, the competitive incentives that manufacturers have to sell fuel economy, and regulatory standards stringent enough to reinforce this Nation's commitment to energy conservation, but not so strong as to cause perverse results.

My concern with the 27.5 is that it brings the policy out of balance, in that it encourages distortions.

Senator METZENBAUM. 26 is sort of the perfect number, but 27.5 causes distortions?

Mr. LEONE. 26 is preferred to 27.5. What the perfect number is I don't know.

Senator METZENBAUM. How would 25 be?

Mr. LEONE. One of the differences between 25 and 26, Senator, is that at 26.0 as the minimum for individual manufacturers, the new car——

Senator METZENBAUM. That is not a minimum. That is the average.

Mr. LEONE. But if that were the average that had to be met by any individual manufacturer, the minimum that had to be met—

anybody could be above it—the actual performance of the new car fleet in the United States will be 27.5 miles per gallon very soon, even if Ford and GM only satisfy 25.

Senator **Metzenbaum**. I am trying to get my mind to follow you. Why is 26 better than 27.5, and, if 26 is better than 27.5, why isn't 25 better than 26 to achieve these objectives?

Mr. **Leone**. The difference between 25 and 26 from the standpoint of the fleet as a whole is that a 26-miles-per-gallon standard would mean there were enough producers at 26 and above so that the new car fleet on average would be at 27.5. There are enough producers producing cars, Senator——

Senator **Metzenbaum**. You lost me. Twenty-six means there is going to be an average of 27.5?

Mr. **Leone**. Twenty-six is what an individual producer has to meet. Many producers exceed that right at the moment.

Senator **Metzenbaum**. Well, let's forget about many. Let's talk about a grouping: Ford, General Motors, and Chrysler. Now, your testimony absolutely floors me, because I can understand everybody else, their arguments. But there is something about yours that I am having great difficulty in following.

Twenty-six is going to help us achieve 27.5 better than 27.5 will?

Mr. **Leone**. If 27.5 causes distortions——

Senator **Metzenbaum**. What distortions?

Mr. **Leone**. I gave two illustrations. One example was ——

Senator **Metzenbaum**. I know about the mobile van and the station wagon.

Mr. **Leone**. The station wagon versus the van.

Senator **Metzenbaum**. Well, what about 25? Why don't we use 25 then as a figure? That would cause greater distortions?

Mr. **Leone**. Fewer distortions.

Senator **Metzenbaum**. Well, let us go to 25.

Mr. **Leone**. Twenty-five would cause fewer distortions.

Senator **Metzenbaum**. Let's bring it down to 24.

Mr. **Leone**. But 25 would not result in an overall average for the new car fleet of 27.5 miles per gallon.

Senator **Metzenbaum**. But 26 would?

Mr. **Leone**. Yes, if Ford and GM came in at 26——

Senator **Metzenbaum**. Twenty-six would also help the Japanese manufacturers in selling more cars in this country if their cars exceeded that, because they would have an additional mile and a half per gallon advantage over American cars, would they not?

Mr. **Leone**. The difference between 26.0 and 27.5 miles per gallon does have competitive implications for the various importers. For the limited product line importer, such as a Saab or a Volvo importer, it is the difference between being in compliance and not being in compliance.

For the Japanese, who have broader product lines, they would actually be competitively better off with the more stringent standard.

Senator **Metzenbaum**. Refresh my recollection. What do we do for manufacturers that come nowhere close to 27.5 or 26 miles per gallon? Rolls-Royce, Jaguar, what do we do with those? How does the law apply to them?

Mr. LEONE. The law applies in two ways. First, there is a gas guzzler tax; and second, there is an exemption for producers with extremely small production levels worldwide.

Senator METZENBAUM. What is that figure?

Mr. LEONE. I believe the figure is 10,000 vehicles.

Ms. CLAYBROOK. Senator, I would like to make a comment, if I may, on this very subject, and it has to do with the concept of corporate average fuel economy. It seems to me that in the committee's consideration of this issue you ought to look at the concept that underlies the statute, which is the corporate average.

The Detroit manufacturers wanted a corporate average, which allowed them to balance large cars against small cars and come to an average figure. This also allows them to sell a large number of large cars, and indeed in this particular year and next year they are really taking advantage of that. That is, they are saying the market demands it and therefore they manufacture these large cars.

For a single line company that only manufactures one car or maybe two cars, it's much more difficult to meet the corporate average fuel economy, and one of the things that we were looking at in the Department of Transportation in 1980 was whether or not the basis for judging the fuel economy number should indeed be changed so that companies have to meet it based on the weight of the car or the type of car that's manufactured. And I think that that is something the committee ought to consider.

Senator METZENBAUM. Ms. Claybrook, as former head of NHTSA, we talk about 26, 27.5, as related to the real world and how many miles per gallon it actually means out on the highways, since the fuel efficiency is calculated under controlled conditions. For example, my Mustang gets 14 miles per gallon and not the 22 or 23 miles per gallon that they told me I was going to get.

What does the 27.5 really mean in the real world as to the average that cars get, would be expected to get?

Ms. CLAYBROOK. Well, the fuel economy numbers are developed by the Environmental Protection Agency when they do the emissions testing, and there has been controversy about this issue since the law was first enacted.

Senator METZENBAUM. I know.

Ms. CLAYBROOK. And I thought when I left the Government in 1980 that the situation was resolved, that, indeed, it was within 5 to 10 percent, it was very close, and no one would make any additional adjustments to it.

Now I understand that this is up for reconsideration, and indeed the NHTSA has said that they cannot calculate the penalties that Ford and General Motors would owe from 1984—particularly General Motors, I know, owes some penalties for 1984 if they do not carry back—because they cannot calculate exactly what the right number is because they do not know what the relationship is between the EPA figure and what it should be.

The presumption is that the EPA figure does not properly estimate the actual——

Senator METZENBAUM. Would you give me your own estimate, not a scientific judgment? With 27.5 in the law and under the EPA method of testing, what would be your best estimate as to what that would amount to in the real world for the average person driving that car, some in the city, some on the roads?

Ms. CLAYBROOK. I think they would probably get at least a mile per gallon less, but I don't know.

Mr. DITLOW. The shortfall, as I recall, Senator Metzenbaum, is about 2.5 miles per gallon. So at 27.5 miles per gallon, you would now be getting a rate of around 25 miles per gallon. So there is, in fact, a gap. We are not getting what Congress originally mandated.

Senator METZENBAUM. Senator Rockefeller.

Senator ROCKEFELLER. Thank you, Mr. Chairman.

Professor Leone, is it not the case that the majority of your clients are in fact meeting the current CAFE standards?

Mr. LEONE. I believe, by count, that is correct, yes.

Senator ROCKEFELLER. Why are you then in favor of lowering the standard, if most of your constituents have taken the steps to meet the standard?

Mr. LEONE. First of all, I have not advocated a lowering of the standards. I do not consider the move from 27.5 to 26 miles per gallon a lowering of the standard, if it prevents distortions which can actually detract from the achievement of fuel economy. From a public policy standpoint—and that was the question I was asked to address by AIA—my concern is that 26 miles per gallon may be a superior way to achieve our fuel economy objectives without creating distortions.

The interests of the individual members of AIA are not a matter on which I can speak, except to observe that interests in rational and effective public policy that serve the interests of the country also serve the interests of individual competitors in the long run. And short-term competitive advantages that are created by quirks of regulation are not something that you can hang a corporate strategy on.

And we do have the problem, or we do have the phenomenon, that our fuel economy program has been eminently successful by balancing standards, prices, and competition, and my concern is that—as a matter of public policy—we may be bringing that out of balance by moving to excessively stringent CAFE standards.

Senator ROCKEFELLER. OK. I guess I would ask this to you and to any other members of the panel that would want to answer. What we've been focusing on here this morning is 27.5, 26, or 25 miles per gallon, or in that range. What we are looking for, I would assume some time out in the future, is fuel economy substantially in excess of that. For example, Congresswoman Boxer was talking about 45 miles per gallon at some point, and that makes sense. That's the direction that we've been moving.

It has to do with the condition of our air, with the cost to the consumer, with the progress of the society, with the commitment of the industry, with the responsiveness and education of the consumer, and all kinds of things.

Now, my basic question is, there has to be a reason for pushing technology. Corporations cannot be told what technologies to push. They can be given incentives and other types of things. But if we roll back the CAFE standards now or in 1986, let's say, doesn't that really preclude the type of signals, free market-based or otherwise, to the big producers of automobiles to be looking at the next generation of engines and cars achieving 35, 45, or 50 miles per gallon?

Mr. **Leone**. Senator, I'd like to respond to that, because I mentioned in my remarks that we really ought to think about the fact that the companies that are not meeting the standards today are not meeting them because of our successes.

This is not a replay of air emissions standards, for example, where they had to be backed off because technology didn't get there. This is a case in which we have so advanced technology that the cost of driving a car an extra mile has actually dropped 22 percent. Not surprisingly, consumers have chosen to take advantage of that by purchasing more luxurious automobiles.

But it's also evidence of the extent to which consumers respond to price. You know, there is a flip side to the economist's argument, of course. Every time price goes up he'll tell you, don't worry about it, it'll take care of fuel efficiency; and the flip side is that every time price goes down fuel efficiency is going to drop.

What we have seen is a tremendous responsiveness to price on the part of consumers, and recognizing this, every competitor has got to be planning for that day—which we here today have all acknowledged will come—when gasoline prices take that upward track.

Senator **Rockefeller**. What's the state of that technology in your judgment?

Mr. **Leone**. The state of that technology is that it is progressing rapidly. We have done the things that were relatively easy to do. Today we need a sustained and continuing effort to improve fuel economy and to develop alternative fuels for powering automobiles.

What we don't want, in my judgment, is a stop and start technological strategy that has us trying to meet a very stringent regulatory standard in 1986 and 1987, the consequence of which is to distort sales, keep cars off the road, sacrifice jobs, and lose our focus on our long-term goal, which is clearly in the interest of the Nation, clearly in the interest of consumers, and, by the way, clearly in the interest of automakers, because every time they can take a dollar out of the price of gasoline that is one more dollar that they can try to compete for in terms of the consumers' expenditure.

Senator **Rockefeller**. Mr. Chairman, could I ask for a comment from one of the other panel members?

Mr. **McDonald**. I should like to respond to that. I fail to understand how you can improve our auto fleet or save additional energy by reducing the fuel economy standards.

I think the fundamental question here is that we know that with a 40- to 60-mile-per-gallon car we can save from 2 to 3 million barrels of oil per day. The fundamental aspect of the law is that NHTSA is considering four aspects of the law in considering whether or not to roll back the standards, and that is:

Technological feasibility, which tons of information is available on the technological capability of the industry to achieve the standards;

Also, economic practicability, and we have the numbers and Arnita is doing the research to show that they have recovered. They have the money to make the investments needed;

Also, the effect of other automobile standards on fuel economy.

Lastly, is the need to conserve energy. We believe that there is still a very large need. The Energy Information Administration has shown that oil imports are increasing again. We are starting to use more energy, and the fact of the matter is the market is going back to buying gas-guzzling cars.

Our concern is that with the possible reduction to 26 miles per gallon, next might be the complete repeal of CAFE. We will just let the market handle it completely, and I think that it could be that the standards could continue to go down even farther.

Mr. **Leone** Mr. McDonald, could I respond to that? My concern is that every time a consumer buys a 23-miles-per-gallon van instead of a 26-miles-per-gallon station wagon we improve the fuel efficiency measured on new cars and on new trucks, but what do we do to actual fuel efficiency on the road? We lower it.

I just want standards that are balanced, that appropriately balance regulatory requirements with prices and competitive effects, so that we do not have distortions which detract us from achieving our goal.

Ms. **Claybrook**. I think, Mr. Rockefeller, first of all, that Professor Leone is ignoring the issue of technology. There is tremendous technology available to the manufacturers to improve the fuel efficiency of cars way beyond 27.5 miles per gallon.

Second, he is concerned about the interrelationship between truck fuel economy standards and car fuel economy standards, which are set separately by the agency, and in fact the NHTSA just lowered the truck fuel economy standards by 1.5 miles. And we are, with the Center for Auto Safety and others, suing because we think they did it improperly. But if that is the concern, then the issue is that they should be linked closer.

Third is that, if you are going to increase the fuel economy above 27.5 miles per gallon, I do not think it should be done on a CAFE basis, because I think it is unfair for GM to be able to sell large cars and to knock out of the marketplace equivalent cars of single-line manufacturers. I just think it is simply unfair.

So I would urge the committee to look at this, taking into account Chrysler's point, which is that they need lead time. In 1981 I issued a proposal for 1985, post-1985 fuel economy. The administration abandoned it in April 1981. The Center for Auto Safety sued and said we have got to plan with long lead times, and the court kicked them out and said it is too soon.

So the agency has certainly been on notice from the day that the Reagan administration came into office that long-term planning was important and necessary and certainly considered important in the prior administration. They just abandoned it.

So I think that these issues are extremely important. Professor Leone is talking about right now just the particular situation of today, without looking into the potential that the manufacturers have and that they have ignored in terms of putting better fuel efficiency into their cars.

Senator **Rockefeller**. Mr. Chairman, a 10-second question.

The CAFE standards were basically put in place as an energy saving mechanism.

Ms. **Claybrook**. Right.

Senator **Rockefeller**. That's energy in terms of oil.

Ms. **Claybrook**. To save fuel and to reduce our vulnerability and our dependence on imported oil.

Senator **Rockefeller**. All right. Would that allow somebody like yourself, Ms. Claybrook, or Mr. Ditlow or Mr. McDonald, to look with interest on an agressive posture toward methanol?

Mr. **McDonald**. Yes, it would.

Ms. **Claybrook**. Sure, I think it would. But I think we have to take into account many, many other factors with that in terms of marketing, availability, and so on.

Mr. **Ditlow**. Neat methanol in the long run is a good deal, but blends are questionable.

Senator **Rockefeller**. Thank you, Mr. Chairman.

Senator **Metzenbaum**. Thank you. The record in this hearing will remain open for 2 weeks. And I want to say to all of the panelists who appeared this morning that there may be additional questions from members of the committee who could not be with us, and we assume that you will respond promptly if there are such questions asked.

I would like publicly at this time to express my appreciation to the chairman, who set up this hearing at my request because I felt that the issue was deserving of our attention, and I am grateful to him for all the time he has been able to put into it, all of the members who have participated, and each of the witnesses who have appeared here this morning.

With that, the hearing stands adjourned.

[Whereupon, at 1:23 p.m., the hearing was adjourned.]

APPENDIXES

APPENDIX I

Responses to Additional Committee Questions

Department of Energy
Washington, DC 20585

June 26, 1985

Honorable Don Nickles
Chairman, Subcommittee on Energy
  Regulation and Conservation
Committee on Energy and Natural Resources
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

On May 14, 1985, William Silvey, Deputy Assistant Secretary for Policy, Planning and Analysis, appeared before the Energy and Natural Resources Subcommittee on Energy Regulation and Conservation to discuss the Corporate Average Fuel Economy Standards (CAFE).

Following that hearing, you submitted written questions for our response to supplement the record. Enclosed are the answers to those questions, which also have been sent directly to the Committee staff.

If you have any questions, please call Cathy Hamilton of my staff on 252-4277. She will be happy to assist you.

Sincerely,

Robert G. Rabben
Assistant General Counsel
for Legislation

Enclosures

JAMES A. McCLURE, IDAHO, CHAIRMAN
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D. MICHAEL HARVEY, CHIEF COUNSEL FOR THE MINORITY

United States Senate
COMMITTEE ON
ENERGY AND NATURAL RESOURCES
WASHINGTON, DC 20510

May 31, 1985

The Honorable William J. Silvey
Deputy Assistant Secretary
for Policy, Planning and Analysis
Department of Energy
Washington, D.C. 20585

Dear Mr. Silvey:

I would like to thank you for your appearance before the Subcommittee on Energy Regulation and Conservation on Tuesday, May 14, 1985. Your comments will be very useful to the Subcommittee as they further evaluate this issue. However, because of the shortage of time during the public hearing, I would like to ask for your response to several questions which were not asked at the hearing. Your additional views on the issues surrounding the Automobile Fuel Economy Standards would be useful in completing the Subcommittee's record. Please feel free to add any comments which you feel would be helpful to the Subcommittee.

Let me thank you again for your testimony and add that the Subcommittee requests that you return your response to these questions by the close of business June 14, 1985. Your cooperation is greatly appreciated.

Sincerely,

Don Nickles

Don Nickles
Chairman
Subcommittee on Energy
Regulation and Conservation

DN/AS/dar
Enclosure

QUESTIONS FROM THE MAJORITY
for William J. Silvey
Department of Energy

QUESTION FOR: MR. SILVEY

- You have stated that the increase in auto fuel efficiency over the past ten years has been an important factor in improving America's energy situation. You suggest that the operations of energy markets, not efficiency regulations imposed on the automotive industry, are responsible for increased efficiency. What analyses has the Department conducted that would support this conclusion?

QUESTION FOR: MR. SILVEY

- A decade ago, the Congress set a 27.5 mpg automobile fuel economy standard as a goal to be achieved by 1985. In setting that target goal, the Congress was looking at some sobering predictions about what petroleum prices were likely to be in 1985. Today, the energy picture is, happily, quite different from the projections. Again, however, we are considering automobile fuel efficiency and the Department of Transportation is involved in a decision-making process with implications that reach into the next century. What has the Department of Energy done, since 1975, to improve its forecasting capability, and what DOE resources are available to DOT as it grapples with decision?

QUESTION FOR: MR. SILVEY

- o You have stated that the CAFE standards represent the kind of intervention in the market that produces undersirable results. Would you provide this Subcommittee with examples of some of the undesirable results of CAFE standards?

QUESTION FOR: MR. SILVEY

- o Total U.S. consumption of petroleum fell 16.7 percent between 1978 and 1984. Total U.S. imports of petroleum declined between 1979 and 1984 in both absolute and percentage terms. U.S. reliance on imports from all sources currently is forecasted to fall slightly during 1985 and to remain essentially flat during 1986. Petroleum prices are expected to follow a comparable trend. U.S. consumption of motor gasoline is expected to decline slightly from 1985-1990. Has the Department of Energy conducted any analyses that would evaluate the role CAFE standards have played and could continue to play in this improved energy picture?

QUESTION FOR: MR. SILVEY

- o Please provide the Subcommittee with any analyses which the Department of Energy has conducted on CAFE standards and future energy demand (per page 52 of hearing transcript).

Questions from the Minority

for William J. Silvey
Deputy Assistant Secretary for Policy, Planning and Analysis
U. S. Department of Energy

Oversight hearing on Auto Fuel Economy Standards
before the Senate Committee on Energy and Natural Resources
May 14, 1985

1) Has the Department of Energy formally submitted any comments on the petition by GM and Ford to rollback the CAFE fuel economy stnadards to 26 mpg, and, in particular, on the issues of energy security and the "need of the Nation to conserve energy"?

2) On April 30, 1985, the Acting General Counsel of the Department of Commerce formally submitted comments on the petition and supported the rollback request. The Commerce Department specifically addressed the need of the U. S. to conserve energy and concluded, "We believe that such a reduction would not have important consequences for the Nation's energy security." Oddly enough, Commerce elected not to comment on the third criterion, the effect of other Federal motor vehicle standards on fuel economy, because the Department "recognized the greater expertise of other government agencies and interested parties in this area."

Why didn't DOE submit comments on the proposal?

What policy analysis has DOE done on this issue?

3) The Department of Commerce addressed the need of the Nation to conserve energy without addressing at all the question of projected U. S. oil imports. Do you think that a proper analysis of the need of the Nation to conserve energy should include some reference to future U. S. demand for oil imports? What can you tell us about DOE's projections? What about EIA's projections?

4) You say in your prepared statement that the CAFE standards "were established almost 10 years ago and are not relevant to our current energy situation." The GM and Ford petition is to roll back the CAFE to 26 mpg indefinitely. Are the CAFE standards relevant to our future energy situation? How?

5) Has your office conducted any analysis on CAFE standards and future energy demand? Would you list for the record what reports your office has produced on this subject?

6) If, as a hypothetical, the domestic car companies chose to only build large cars domestically and to abandon the small car market and instead build these abroad and import them, do you think the Federal Government should be concerned about that?

7) How much has U. S. domestic crude oil production increased since the decontrol of crude oil -- what percentage increase? What are the DOE projections for domestic oil production over the next 10 years?

POST-HEARING QUESTIONS AND ANSWERS

Relating to the

MAY 14, 1985, HEARING

before the

SUBCOMMITTEE ON ENERGY REGULATION AND CONSERVATION

of the

COMMITTEE ON ENERGY AND NATURAL RESOURCES

UNITED STATES SENATE

WITNESS: WILLIAM SILVEY

QUESTION FROM THE MAJORITY

Question #1:	You have stated that the increase in auto fuel efficiency over the past ten years has been an important factor in improving America's energy situation. You suggest that the operations of energy markets, not efficiency regulations imposed on the automotive industry, are responsible for increased efficiency. What analyses has the Department conducted that would support this conclusion?
Answer:	A review of manufacturers' past and future product planning and investment and the shifts in market demand suggests that the following have been responsible for most of the improvement in fuel economy:

- manufacturer and consumer responses to rising fuel prices;
- competition among foreign and domestic manufacturers and;
- continuing fuel economy technology developments.

While it is likely that the CAFE standards did accelerate the development and introduction of certain fuel economy related changes during the era of oil price controls, the fact that the auto manufacturers exceeded the standards during times of rising fuel prices further supports the view that the marketplace was predominant in determining fuel economy levels.

This view is also supported by examining the investments made by the auto industry. Over $50 billion of investments have been made by domestic manufacturers, to revamp their products, between 1975 and 1985. Additional billions of dollars of investment have been committed for the years beyond 1985. This level of investment is being made primarily as a result of the manufacturers' expectations regarding market demand for fuel economy (among other attributes) and not government requirements.

QUESTION FROM THE MAJORITY

Question #2: A decade ago, the Congress set a 27.5 mpg automobile fuel economy standard as a goal to be achieved by 1985. In setting that target goal, the Congress was looking at some sobering predictions about what petroleum prices were likely to be in 1985. Today, the energy picture is, happily, quite different from the projections. Again, however, we are considering automobile fuel efficiency and the Department of Transportation is involved in a decision-making process with implications that reach into the next century. What has the Department of Energy done, since 1975, to improve its forecasting capability, and what DOE resources are available to DOT as it grapples with decision?

Answer: In the past decade, much has changed with regard to energy forecasting. Ten years ago energy forecasters were troubled by lack of adequate energy data (both U.S. and worldwide), inadequate energy models, and a limited understanding of the interaction of energy with the economy. DOE has made steady progress in overcoming these deficiencies.

The establishment of the Energy Information Administration with the specific mission and powers to collect energy data, and analyze and disseminate it has resulted in more timely and more accurate data being available to energy system modellers and analysts. Such information is necessary for developing new theories and relationships describing the historical behavior of energy/economy systems. The increased availability of reliable international energy data now permits a fuller understanding of world oil prices and their effects on world wide energy production and consumption patterns.

Models used for energy forecasting have advanced from rather simplistic correlation relationships with all their attendant faults to complex simulations of world energy markets for all fuels and all consuming sectors. Future world oil prices, which 10 years ago were mainly an input assumption, are now predicted by the simulation models based on such factors as international economic growth, energy resources and relative production, energy consumption, and cost factors.

While our energy forecasting tools and capabilities have increased considerably over the last 10 years, any long term projection, including ours, will remain subject to many unpredictable events such as technological change, weather, oil supply disruptions, etc. As such, there will always be a high degree of uncertainty in making long-run forecasts.

DOE is prepared to provide DOT any energy related information or analysis that may be needed. Regular short-term and long-term projections of energy markets are available on a routine basis. Should DOT propose a rule to change the 27.5 MPG, DOE will provide comments related to three of the statutory criteria: economic practicability, technical feasibility and the need of the Nation to conserve energy. DOE has analyses underway related to these issues.

QUESTION FROM THE MAJORITY

Question #3: You have stated that the CAFE standards represent the kind of intervention in the market that produces undersirable results. Would you provide this Subcommittee with examples of some of the undesirable results of CAFE standards?

Answer: Economic regulations such as the CAFE standards can distort marketplace decisions, often in undersirable ways. In the case of the automobile industry these distortions could include:

- Possibly raising the price of larger cars and engines, thereby limiting the sales of these cars and restricting consumer choice. This could also encourage consumers to defer large car purchases, so that they would be driving less fuel efficient cars for longer periods.
- Forcing undue industry attention to and investment in fuel economy measures when other short and longer term considerations, e.g., product quality, manufacturing costs, alternative fuels and longer term research on alternative engines, may be more important; and,
- The need for inefficient year-to-year technical changes (and associated investment) to meet the year-to-year increases in the standards between 1980 and 1985.
- The above possible effects are especially significant because of the importance of auto manufacturing to the U.S. economy.

QUESTION FROM THE MAJORITY

Question #4: Total U.S. consumption of petroleum fell 16.7 percent between 1978 and 1984. Total U.S. imports of petroleum declined between 1979 and 1984 in both absolute and percentage terms. U.S. reliance on imports from all sources currently is forecasted to fall slightly during 1985 and to remain essentially flat during 1986. Petroleum prices are expected to follow a comparable trend. U.S. consumption of motor gasoline is expected to decline slightly from 1985-1990. Has the Department of Energy conducted any analyses that would evaluate the role CAFE standards have played and could continue to play in this improved energy picture?

Answer: Improved fuel efficiency has and will continue to play an important role in improving the U.S. energy situation. Over 1 million barrels/day (B/D) of oil has been saved by the improvement in new car fuel economy between 1975 and 1985.

The Department of Energy has developed a model for calculating the energy savings from changes in new car fuel economy. The model does not take account of secondary effects of changing new car fuel economy and thus possibly overstates energy savings from increases in the new fleet mpg. According to the Department's model, an additional 1 mpg improvement in new car fuel economy, over today's 26 mpg level, will save about 10,000 B/D per year or a total of about 80,000 to 90,000 B/D (about 1/2% of current U.S.

petroleum consumption) by the time, several years from now, cars with this level of fuel efficiency have penetrated the entire fleet. However, as fuel economy continues to rise, each added 1 mpg improvement saves less gasoline. In 1990, when we expect average new car fuel economy to be above 30 mpg, an additional 1 mpg will save only about 6,000 B/D per year.

As indicated in the answer to Question # 1, we believe that past improvements have come about largely in response to market forces. CAFE standards have played a small role. We believe that further economical fuel efficiency gains will be primarily the result of market prices, not government regulation.

QUESTIONS FROM THE MAJORITY

Question #5 Please provide the Subcommittee with any analyses which the Department of Energy has conducted on CAFE standards and future energy demand (per page 52 of hearing transcript).

Answer: The requested analyses have been submitted to the Committee.

QUESTION FROM THE MINORITY

Question #1: Has the Department of Energy formally submitted any comments on the petition by GM and Ford to rollback the CAFE fuel economy standards to 26 mpg, and, in particular, on the issues of energy security and the "need of the Nation to conserve energy"?

Answer: No. DOE has a statutory responsibility to provide comments in the event that DOT decides to open a rulemaking.

QUESTION FROM THE MINORITY

Question #2: On April 30, 1985, the Acting General Counsel of the Department of Commerce formally submitted comments on the petition and supported the rollback request. The Commerce Department specifically addressed the need of the U.S. to conserve energy and concluded, "We believe that such a reduction would not have important consequences for the Nation's energy security." Oddly enough, Commerce elected not to comment on the third criterion, the effect of other Federal motor vehicle standards on fuel economy, because the Department "recognized the greater expertise of other government agencies and interested parties in this area."

Why didn't DOE submit comments on the proposal? What policy analysis has DOE done on this issue?

Answer: DOE did not feel it was necessary to comment on the petitions, per se. Should DOT decide to propose a rule to reduce the post-1985 standards in response to the petitions, DOE will provide comments.

The results of analysis DOE has conducted relevant to this issue have been submitted to the Committee. Additional analysis is underway. The results of that analysis will be made available to DOT.

QUESTION FROM THE MINORITY

Question #3: The Department of Commerce addressed the need of the Nation to conserve energy without addressing at all the question of projected U.S. oil imports. Do you think that a proper analysis of the need of the Nation to conserve energy should include some reference to future U.S. demand for oil imports? What can you tell us about DOE's projections? What about EIA's projections?

Answer: Energy conservation is as much an energy resource as are new domestic crude oil reserves or electric baseload power stations. It can contribute to improved economic efficiency and overall reduction in consumption, as well as helping to reduce oil imports. To this extent, the importance of conservation should, in part, take account of expected oil imports.

However, future trends in oil imports are very difficult to project beyond a year or two. For example, the Energy Information Administration's 1977 Annual Report to Congress projected that net oil imports by the U.S. would, in the "reference case", reach 11 millions of barrels per day by 1985 and 14 millions of barrels per day by 1990. Net imports for this year are now forecast to be less than 4.5 millions of barrels per day, substantially less than half of what was forecasted in 1977.

The Department considers a number of private and government forecasts in formulating its assessment of possible future trends in energy markets. Currently the Department is working on the National Energy Policy Plan V (NEPP-V). The NEPP-V will contain additional information and forecasts of possible energy trends.

The Energy Information Administration's Annual Energy Outlook for 1984 contains a range of projections for oil imports into the United States between now and 1995, as well as a set of sensitivity analyses that explore specific uncertainties about the factors that affect imports. As the Annual Energy Outlook states clearly in its introduction and throughout the text, its primary message is that future oil imports (and other aspects of energy markets) depend on a number of influences that cannot be projected with certainty.

The Annual Energy Outlook describes potential scenarios that lead to a wide range of possible outcomes. More specifically, the range of oil import levels implied for 1995 by the basic scenarios constructed in the Annual Energy Outlook is 5.2 to 11.7 millions of barrels per day. Under a set of conditions involving unusually high economic growth or extremely depressed oil prices, imports could double. Under different conditions, including continuation of recent trends in oil production, conservation, and substitution of other fuels, the import situation in 1995 could be very little different than it is today. Continuation of recent conservation trends or favorable, but quite plausible, assumptions about factors affecting oil supply could hold imports to a range of 5.6 to 6.5 millions of barrels per day.

QUESTIONS FROM THE MINORITY

Question #4: You say in your prepared statement that the CAFE standards "were established almost 10 years ago and are not relevant to our current energy situation." The GM and Ford petition is to roll back the CAFE to 26 mpg *indefinitely*. Are the CAFE standards relevant to our *future* energy situation? How?

Answer: DOE does not expect the future energy situation to be so different as to warrant increased government intervention in the area of auto fuel efficiency. We expect that continuing market response to energy prices, competition among auto manufacturers, and continued technological progress, will assure that auto fuel economy continues to improve. Should that situation change, the Secretary of Transportation has adequate authority under the current legislation to deal with any new events.

QUESTIONS FROM THE MINORITY

Question #5: Has your office conducted any analysis on CAFE standards and future energy demand? Would you list for the record what reports your office has produced on this subject?

Answer: A list of studies and reports related to this subject, by DOE staff and DOE contractors, is attached.

Reports and Analyses by the Department of Energy
Staff and Contractors
on Automotive Fuel Economy and Energy Impacts

DOE Staff Analyses, Reports and Technical Papers

1. "Monthly Data Report #22," Phil Patterson, Office of Vehicle and Engine R&D, U.S. DOE, May 1985.

2. "Dynamics of Light Duty Vehicle Fuel Economy - 1978 to 1984," Phil Patterson, et al., U.S. DOE, SAE Paper 850527, February 1985.

3. "Monthly Data Report #16," Phil Patterson, Office of Vehicle and Engine R&D, U.S. DOE, May 1984.

4. "Reasons for Changes in MPG Estimate, Model Year 1978 to the Present," Phil Patterson, et al., U.S. DOE, SAE Paper 840500, March 1984.

5. "Impact of Consumer and Manufacturer Decisions on New Car Fuel Economy," Phil Patterson, et al., U.S. DOE, SAE Paper 830545, February 28, 1983.

6. "United States Automobile Fuel Economy Policies and Consumption Effects," Barry McNutt, U.S. DOE, August 1982.

7. "Cost Effectiveness of 1985 Automobile Fuel Economy Standards," Carmen Difiglio, et al., U.S. DOE, SAE Paper 790930, October 1, 1979.

DOE Contractor Reports

8. "Motor Vehicle MPG and Market Shares Report: Model Year 1984," Oak Ridge National Laboratory, U.S. DOE, January 1985.

9. "The Motor Fuel Consumption Model, Eleventh Periodic Report," Energy and Environmental Analysis, Inc., November 7, 1984.

10. "Motor Vehicle MPG and Market Shares Report" Oak Ridge National Laboratory, U.S. DOE, February 1984.

11. "The Highway Fuel Consumption Model, Tenth Quarterly Report," Energy and Environmental Analysis, Inc., November 1983.

12. "Revised Projections of Fuel Economy and Technology for Highway Vehicles, Final Report," Energy and Environmental Analysis, Inc., June 15, 1983.

13. "Consumer Expectations for Future Gasoline Prices," Energy and Environmental Analysis, Inc., May 1983.

QUESTIONS FROM THE MINORITY

Question #6: If, as a hypothetical, the domestic car companies chose to only build large cars domestically and to abandon the small car market and instead build these abroad and import them, do you think the Federal Government should be concerned about that?

Answer: The energy conservation impacts of such a scenario are hard to project without developing a detailed example; however, they probably would be minor. DOE defers to the Departments of Transportation and Commerce for comments on the broader economic impacts of the unlikely scenario described in the question.

QUESTION FROM THE MINORITY

Question 7:	How much has U.S. domestic crude oil production increased since the decontrol of crude oil -- what percentage increase? What are the DOE projections for domestic oil production over the next 10 years?
Answer:	Domestic crude oil production has increased by about 340,000 barrels per day, or about 4.0 percent, since the decontrol of crude oil prices in 1981.

Table 1

Domestic Crude Oil Production
(Million Barrels Per Day)

Year	Crude Oil[1]
1981	8.57
1982	8.65
1983	8.69
1984[2]	8.76
1985[3]	8.91

1/ Includes lease condensate
2/ Preliminary
3/ January-March, average.

Source: U.S. Department of Energy, Energy Information Administration. Petroleum Supply Monthly, March 1985, DOE/EIA - 0109 (85/03), page 6.

The Energy Information Administration projections for domestic crude oil production from 1985 through 1995 follow. There is significant uncertainty associated with these projections. Domestic oil production projections are very sensitive to the assumptions made about future world crude oil prices and the costs of finding new domestic oil reserves. The base case projection below uses mid-range oil price and finding cost estimates. The high and low projections assume high and low crude oil prices respectively.

Table 2

Projections of Domestic Crude Oil Production
Million Barrels Per Day)

	Crude Oil 1/		
Year	Low	Base	High
1985	8.86	8.86	8.86
1986	8.65	8.70	8.76
1987	8.49	8.59	8.70
1988	8.26	8.45	8.67
1989	7.99	8.28	8.70
1990	7.80	8.25	8.81
1991 2/	7.31	8.04	8.84
1992 2/	6.83	7.83	8.86
1993 2/	6.34	7.61	8.89
1994 2/	5.86	7.40	8.91
1995	5.37	7.19	8.94

1/ Includes lease condensate
2/ Extrapolated from EIA figures

Source: U.S. Department of Energy, Energy Information Administration. Annual Energy Outlook 1984, DOE/EIA - 0383(84), January 1985, pages 277 and 297.

U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

The Administrator

400 Seventh St., S.W.
Washington, D.C. 20590

JUL - 9 1985

The Honorable Don Nickles
Chairman, Subcommittee on Energy, Regulation and Conservation
Committee on Energy and Natural Resources
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

I am enclosing our answers to the supplemental questions you asked relating to the Automobile Fuel Economy Standards.

We appreciate the Subcommittee's interest in this matter.

Sincerely,

Diane K. Steed

Diane K. Steed

Enclosure

QUESTIONS FROM THE MAJORITY

Majority Question 1: In light of the Supreme Court opinion that found a one-house legislative veto to be unconstitutional, how does the Department view its authority under Section 502(a)(4) of the Motor Vehicle Information and Cost Savings Act, which permits the Secretary to amend the average fuel economy standard for Model Year 1985 and thereafter to below 26.0 mpg or above 27.5 mpg?

Answer: Section 502(a)(4) of the Cost Savings Act permits the Department to establish fuel economy standards for passenger cars at levels other than 27.5 mpg for model year 1985 or any subsequent model year. The statute provided that changes outside the range of 26.0-27.5 mpg were subject to a one-house legislative veto; however, such vetoes were declared unconstitutional in the Supreme Court's 1983 Chadha decision.

We have been advised by the Department of Justice that the legislative veto provision is fully severable from the balance of section 502(a)(4), so this Department retains its authority to establish fuel economy standards either below 26.0 mpg or above 27.5 mpg. Our authority to set standards within the 26.0-27.5 mpg range, which was not subject to legislative veto, also continues in effect.

It should be emphasized that, while the Department has administrative authority to establish fuel economy standards at levels other than 27.5 mpg, any such standard must be at the "maximum feasible" level for the model year in question, as required by section 502(a)(4) of the Act.

Majority Question 2: Wouldn't the Secretary's amendment of the standard be subject to challenge even if neither House disapproves, because the amendment would have been approved by application of an unconstitutional process?

Answer: As noted in response to the previous question, we have determined that the legislative veto provision is fully severable from the balance of section 502(a)(4) of the Act. Thus, the Department retains its authority to establish fuel economy standards both within and outside the 26.0-27.5 mpg range, so long as the standard is at the "maximum feasible" level for the model year in question. The validity of any amendment to the standards would therefore not be affected by any Congressional "review" action taken under the legislative veto provision.

Majority Question 3: Would you comment on the cost effectiveness of the CAFE standards? What analyses has the Department conducted and what do those analyses disclose?

Answer: The Department has not attempted to evaluate the cost-effectiveness of the CAFE standards because of the difficulty inherent in determining whether particular fuel efficiency improvements are attributable to the CAFE standards or market demand. However, for each fuel economy standard, the Department has conducted a regulatory impact analysis which analyzed the cost-effectiveness of each fuel efficiency improvement available to the manufacturers. At the time each of these analyses were conducted, the Department concluded that cost-effective technologies were available to the manufacturers to meet each passenger automobile and light truck fuel economy standard. The Department has also noted, in specific cases, that some fuel efficiency improvements such as turbocharging and the substitution of certain costly lightweight materials for steel would not have been cost-effective. It should be noted that manufacturers have generally improved the fuel efficiency of their vehicles by using the most cost-effective technologies first. Thus, as the fuel efficiency of the nation's new car fleet rises, the technologies which remain available to improve fuel efficiency tend to become increasingly less cost-effective.

Majority Question 4: Has the Department of Transportation completed any analyses of the competitive effect on auto manufacturers of a reduction in the CAFE standard for passenger cars?

Answer: The Department is currently reassessing the passenger car fuel economy standards for model year 1986 and beyond in response to petitions from General Motors, the Ford Motor Company and the Center for Auto Safety. General Motors and Ford have requested a reduction of the standard from the present 27.5 mpg to 26.0 mpg. Several commenters to the petition have questioned the competitive effect of such a revision on the various auto manufacturers. The Department is reviewing that matter as part of its consideration of the petitions. When that review is completed, our conclusions will be placed in the public docket.

Majority Question 5: You have stated that you expect CAFE levels to continue to increase at a rate "determined by the factors of new technology and consumer demand." Does this indicate that without new legislation, the Agency would not consider it appropriate to set a standard higher than the current 27.5 mpg?

Answer: As noted in my May 14 testimony before the Subcommittee, the auto manufacturers' CAFE levels (i.e., those actually achieved) have increased in recent years -- 24.2 mpg in model year 1983, 25.3 in MY '84, and 25.7 in MY '85 -- and we expect the rate of increase will continue to be determined by factors of new technology and consumer demand. The CAFE levels already achieved by manufacturers are relevant factors in considering what fuel economy standard is the "maximum feasible" for a given model year. If the Department's review of fuel economy standards indicated that a standard higher than 27.5 mpg was the "maximum feasible" level for a model year, we could proceed to establish that higher standard using our current legal authority (section 502(a)(4) of the Act). No new legislation would be required.

The Department believes its administrative authority under section 502(a)(4) to determine "maximum feasible" levels is an essential feature of the fuel economy statute. We would not favor any legislation restricting that authority.

Majority Question 6: Total U.S. consumption of petroleum fell 16.7 percent between 1978 and 1984. Total U.S. imports of petroleum declined between 1979 and 1984 in both absolute and percentage terms. U.S. reliance on imports from all sources currently is forecast to fall slightly during 1985 and to remain essentially flat during 1986. Petroleum prices are expected to follow a comparable trend. U.S. consumption of motor gasoline is expected to decline slightly from 1985-1990. Does NHTSA, as part of its consideration of the petitions before the Agency, plan to ask the Department of Energy to conduct any analyses that would evaluate the role CAFE standards have played and could continue to play in this improved energy picture?

Answer: The Department of Transportation does not believe it is feasible to make any quantitative determinations as to how much of the improved energy picture cited above was due to CAFE standards, as opposed to market demand. Looking at trends in manufacturers' CAFE levels, it is apparent that manufacturers exceeded the standards when there was strong consumer demand for greater fuel efficiency, and had difficulty meeting the standards when consumer demand for this attribute weakened. It is clear that market demand is a major determinant of CAFE levels. Based on the above, we do not anticipate asking the Department of Energy to study the issue for us. However, the Department of Energy takes part in our rulemaking process and would provide comments on any proposed change.

Majority Question 7: There has been considerable discussion about the March filing dates of the Ford and GM petitions, since this necessitated a shortening of the rulemaking process. Did the National Highway Traffic Safety Administration at any time indicate to Ford and GM that a March 1, 1985, filing date would be acceptable?

Answer: NHTSA did not indicate to Ford or GM that a March 1, 1985 filing date would be acceptable. In the light truck rulemaking, NHTSA indicated that, as a general matter, petitions should be submitted by the early part of the calendar year preceding the model year in question. In an effort to act responsibly, the Department has expedited its consideration of the manufacturers' request for changes to the model year 1986 fuel economy standard in view of the imminence of the start of the model year. We have not eliminated any of the steps in the rulemaking process.

The Ford and General Motors petitions were filed on March 1, 1985, and we "granted" those petitions by notice published in the Federal Register on March 28. That "grant" did not constitute a rulemaking proposal by the Department; it simply invited comments from the public as to whether a change in the standard should be proposed. (This initial request for comments, prior to the usual "proposal and comment" stage, is an extra step in the rulemaking process which the Department has taken to encourage maximum public input and involvement in the decision-making process.) The comment period closed April 29, and we are currently reviewing the information we received. If the Department decides to propose a change in the standard, then a full rulemaking procedure would be instituted -- a notice of proposed rulemaking would be published in the Federal Register, public comment would again be invited, a public hearing on the matter would be held, and all comments would be carefully analyzed. Final action on a proposal would not be taken until all of those steps were completed.

Majority Question 8: If yes . . . Recognizing that a shortened rulemaking process would result, on what did the Agency base the decision that a March 1985 filing date of a petition to reduce the standard for Model Year 1986 was acceptable?

Answer: As indicated in our answer to Question 7, NHTSA did not indicate that March 1, 1985 would be acceptable. However, the general question of the timeliness of petitions for reducing standards was raised in a recent rulemaking action concerning light trucks. Ford had petitioned the Department in November 1983 to reduce the MY84 light truck standard; we denied that request as untimely. Our decision on this issue, which was published in the Federal Register along with decisions on light truck standards for MY85 and MY86, relied upon legislative history stating that reductions in fuel economy standards "can be promulgated at any time prior to the beginning of the model year in question." We declined Ford's request to specify a precise deadline for filing petitions to amend fuel economy standards, but we did indicate as a general matter that such petitions should be submitted by the early part of the calendar year preceding the model year in question.

A copy of the Federal Register notice discussing this issue in detail is attached.

We note that Chrysler has questioned the timeliness of the pending Ford and GM petitions on the MY86 passenger car standard. Those comments are under review, and will be addressed in the Department's decision on whether to propose a revised standard for that model year.

Majority Question 9: If the Congress were to enact legislation setting new CAFE standards for the post-1985 era by establishing a standard for 1995 and directing the Secretary of Transportation to establish interim standards for 1987-1994, how long would the Department need to develop interim standards? How much lead time would be appropriate for the automakers to achieve the 1987 standard?

Answer: If the Department were required to develop 1987-1994 fuel economy standards in a single rulemaking, the Department would require at least 18-24 months from the date of enactment to complete such a rulemaking. Such an undertaking would be extremely complex, in light of the difficulty of calculating the "maximum feasible" CAFE level many years in advance, and the rulemaking process could require considerable time. The Department would have to collect extensive data on post-1984 fuel economy capabilities that are presently not available to us. While we have already received some data on the manufacturers' claimed fuel economy capabilities for model years 1987-1990, as part of our current rulemaking, we do not have any data on model years 1991-1994, and would thus have to collect such information.

With respect to lead time, the Cost Savings Act currently requires that any amendment increasing the stringency of a standard must be made at least 18 months prior to the beginning of a model year. The Department does not believe that the minimum amount of time should be reduced, since 18 months is a very short time for manufacturers to make substantial technological improvements in their vehicles beyond those which are already in progress. The lead time appropriate for a new model year 1987 standard would depend in large part on the level of such a standard.

Majority Question 10: In petitioning the National Highway Traffic Safety Administration for an increased CAFE standard for passenger cars, the Center for Auto Safety asserted that the Agency has failed "to collect the information it needs to pursue its statutory mandate in a wise and well-informed manner." Has the Agency failed in this regard?

Answer: No. The agency constantly monitors industry developments, consumer trends and energy reports to collect information relevant to fuel economy and to prepare the annual report to Congress required by the Cost Savings Act. For example, the agency collects information from the automotive trade press on manufacturers' future product plans. The agency also receives data from the semi-annual reports which manufacturers are required to submit to NHTSA on fuel economy under 49 CFR Part 537. In addition, the agency sends questionnaires as needed to the manufacturers soliciting data relevant to fuel economy rulemakings, as well as seeking comment from the general public. When the need has arisen, as in the current rulemaking, we have not hesitated to collect such data in detailed form. For example, with regard to the Center's petition, we invited and received information in response to a grant notice (published in the Federal Register on November 28, 1984) and a detailed questionnaire for manufacturers (published in the Federal Register on December 10, 1984).

Majority Question 11: Please provide the Subcommittee with a chart showing the fuel economy standards that the automobile manufacturers have achieved to date (per page 49 of hearing transcript).

Answer: The requested material is attached.

PASSENGER CAR CAFE LEVELS
(no EPA adjustment)

	1978	1979	1980	1981	1982	1983	1984*	1985*
Standard:	18.0	19.0	20.0	22.0	24.0	26.0	27.0	27.5
Manufacturer								
American Motors	18.6	19.9	21.5	22.4	[23.9]	33.5	35.5	33.3
Chrysler	18.4	20.5	21.7	26.1	27.2	27.0	27.1	27.5
Ford	18.4	19.2	22.1	23.4	24.6	[23.8]	[25.1]	[25.5]
General Motors	19.0	19.1	21.9	23.2	24.2	[23.5]	[24.3]	[25.1]
Alfa Romeo	21.4	20.7	21.7	22.5	24.6	[25.2]	[26.6]	[27.3]
AMC-Renault	30.4	30.3	33.3	29.4	32.4	31.4	33.2	31.2
Bertone	N/A	N/A	N/A	N/A	N/A	29.1	29.2	29.2
BMW	19.7	20.1	25.9	26.6	26.4	[25.6]	27.3	[25.6]
Chrysler-Mitsubishi	30.6	32.3	32.5	32.0	33.1	33.9	37.0	34.9
Fiat	21.7	26.4	26.6	27.6	25.7	[13.2]	N/A	N/A
Ford Imports	37.3	32.1	29.8	34.3	34.4	35.4	34.9	[25.0]
Honda	33.7	29.0	29.2	30.8	33.4	35.3	35.2	34.0
Isuzu	N/A	N/A	N/A	34.7	37.6	30.7	29.3	28.1
Jaguar	21.1	21.2	21.6	[18.5]	[18.8]	[18.8]	[19.0]	[19.0]
Mazda	35.5	25.6	26.0	31.1	29.4	28.9	30.7	29.3
Mercedes-Benz	19.2	20.5	23.9	25.6	26.3	26.6	[25.4]	[23.4]
Mitsubishi	N/A	N/A	N/A	N/A	N/A	30.2	30.4	32.0
Nissan (Datsun)	26.8	26.8	31.2	30.5	30.7	32.7	31.6	29.3
NUMMI (GM-Toyota)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	36.6
Peugeot	24.8	23.8	27.2	27.9	27.6	[25.1]	[24.5]	[24.8]
Pininfarina	N/A	N/A	N/A	N/A	N/A	28.9	27.9	27.9
Porsche	(included in Volkswagen)							[25.5]
Saab	22.7	21.7	23.4	23.3	24.1	[25.9]	[25.2]	[25.5]
Subaru	29.4	29.0	27.9	31.2	31.6	32.4	33.3	33.0
Toyota	26.8	24.0	27.4	30.9	30.5	32.6	32.9	33.2
Volvo	21.2	21.0	21.6	22.3	24.6	[25.8]	[26.4]	[26.5]
Volkswagen	27.2	28.6	31.3	34.2	32.9	30.0	28.9	29.8

Figures in [brackets] indicate CAFE values below that year's standard. Because of the availability of carryforward/carryback credits, this generally does not indicate noncompliance.

*Manufacturers' estimates as submitted to NHTSA in semi-annual reports.

Minority Question 1: In ruling on the petition to roll back the CAFE standard you are required by statute to consider "the need of the Nation to conserve energy."

I understand that at a briefing of our Committee staff Mr. Felrice indicated that NHTSA has not made any request for DOE to supply information, policy analysis, or to take a position on this issue of the need of the nation to conserve, future oil imports, and so on. What specifically do you think is the need of the Nation to save energy and upon what specific information will you rely in considering this issue?

Answer: NHTSA has not formally requested DOE to provide information on "the need of the Nation to conserve energy" because the agency regularly receives such data from DOE as part of NHTSA's ongoing monitoring of this issue. This information includes the Monthly Energy Review (issued by the Energy Information Administration) and the Monthly Data Reports issued by the Office of Vehicle and Engine Research and Development in DOE's Office of the Assistant Secretary for Conservation and Renewable Energy. NHTSA staff members also have regular contacts with their DOE counterparts. In addition, the Cost Savings Act specifically provides DOE the opportunity to review and comment upon any proposal to establish or revise a fuel economy standard before it is issued, and NHTSA must address those comments. Thus, a "formal" letter requesting such information or analyses would be superfluous.

NHTSA believes that, in an absolute sense, the need for energy conservation is important. However, "the need of the Nation to conserve energy" is but one of four specifically-enumerated statutory criteria NHTSA must use in determining "maximum feasible" fuel economy standards. This criterion must be considered along with "economic practicability," "technological feasibility," and "the effects of other Federal motor vehicle standards."

The actual determination of the need of the Nation to conserve energy will be made in the course of our review of the Ford and GM petitions. In arriving at this determination, the agency relies primarily on the information routinely received from DOE.

Minority Question 2: In your testimony you indicated that DOE has submitted material in response to the rollback petition. What have they submitted? Has anything been submitted officially on behalf of DOE in response to the petition? Has DOE taken any position (as did the Commerce Department) on the "need of the Nation to conserve energy" or the issue of the proposed rollback?

Answer: DOE has not provided formal comments to DOT on the specific issues raised by the pending Ford and GM petitions. As described in our answer to Minority Question 1, NHTSA regularly receives general technical and analytical data from DOE. In addition, DOE has testified before the Committee on the issue of the free market and the impact of the corporate average fuel economy standards. However, none of these constitute DOE's comments on the "need of the Nation to conserve energy" in the context of the specific petitions. DOE has the statutory responsibility to provide comments in the event that DOT decides to open a rulemaking.

Minority Question 3: In determining the need of the Nation to conserve energy, will you consider the Energy Information Administration forecast of oil imports to the year 1995 which show that if oil prices remain low there will be a substantial resurgence in our oil imports in this decade? Will you consider such things as the recent re-evaluations of our potential oil production from the Outer Continental Shelf? Will you consider the U.S. Geological Survey reports which indicate that the Mid East will increasingly dominate future oil markets because over 60 percent of the world's proven reserves are there, it is the best hunting ground for new oil, and their reserves to production ratios are by far the lowest in the world?

Answer: The Agency is currently considering all of these factors in its ongoing analysis of the impacts of lowering the passenger car fuel economy standards for model year 1986 and beyond in response to petitions from General Motors and the Ford Motor Company. We will place our conclusions in the public docket when we announce our decision on the petitions.

Minority Question 4: You say in your prepared statement, "It is the Administration's position that free market factors, rather than CAFE standards, are the most efficient means of achieving appropriate levels of fuel economy over the long run." What about in the short run? For example here is a General Motors ad that ran in the Washington Post in November of 1979 which says, "Today, we believe the marketplace is demanding cars that, based on a fleet average, will be even more fuel-efficient than those required by the government. Just meeting government mileage standards for the 1980's won't be enough to keep us in business." The marketplace can be quite fickle, can't it?

Answer: Because of the flexibility and responsiveness inherent in market forces, the demand for and sales of fuel-efficient vehicles will reflect the combined effects of consumer preferences, product availability and pricing, and the supply and cost of fuel. The market will provide strong incentives for the purchase and use of fuel-efficient vehicles in the event of rising fuel prices or limited fuel availability, and relatively less strong incentives during periods of declining fuel prices and increased fuel supplies.

By contrast, the fuel economy standards are designed to increase the supply of fuel-efficient cars, but they have little or no effect on consumer demand for such vehicles. Since the standards affect only half of the supply-demand relationship, they may encourage manufacturers to produce excess supplies of small fuel-efficient cars as compared to demand, or to restrict production of other vehicles for which there is consumer demand. If these imbalances become too large, they may cause severe economic consequences. We do not believe that such constraints are, in the long run, healthy for the Nation's economy.

Because market forces are flexible and responsive to changing conditions, they cannot be predicted with exact accuracy in the short run. Fuel economy standards are not flexible, since they are set by government regulation. However, since the standards are based in large part on projections of uncertain economic and technological occurrences in the future, they may also turn out to be imprecise or inaccurate, and thus result in standards which do not truly represent "maximum feasible" fuel economy levels for a given model year. The difficulties inherent in such projections are demonstrated by short-run projections made by both government and industry during the late 1970's that petroleum prices would continue to rise during the 1980's, when in fact those prices have stabilized or even declined in real terms.

As to whether market forces will demand improvement in energy efficiency, we believe the answer is yes. The Federal government's decision to decontrol petroleum prices will assure that market incentives to conserve energy are more fully taken into account by motorists in their decisions on purchasing and use of automobiles. The effectiveness of these incentives was shown in the late 1970's, when rapidly rising fuel prices resulted in substantially increased consumer demand for small vehicles, which was in turn met by manufacturers (both domestic and foreign) with CAFE achievement levels even greater than those set by the government's minimum standards.

Minority Question 5: I understand that the CAFE standards are a major impediment to our domestic auto companies moving their production of small cars abroad. Is this true, and would you explain why this is so?

Answer: The Cost Savings Act requires that manufacturers separate their domestic and non-domestic vehicle fleets for CAFE compliance purposes. (The Act defines domestic vehicles as those with 75 percent or greater U.S. or Canadian content.) Each vehicle fleet must separately comply with the fuel economy standards.

Because smaller cars are generally more fuel-efficient than larger cars, the standards provide incentives for manufacturers to maintain a particular balance between their large and small car production in each fleet. The standards thus may tend to discourage domestic manufacturers from moving their small-car operations (parts manufacture or vehicle assembly) to foreign countries. Similar considerations -- of keeping proper balance between different sized cars in each fleet -- would affect foreign manufacturers which might consider establishing operations in the U.S.

Of course, cost factors and other considerations also play a significant role in determining where manufacturers locate their operations.

Minority Question 6: The CAFE standard for 1985 has been on the books for a decade. General Motors and Ford petition you to roll back the standard on March 1 of this year and you stop taking comments two months later and are rushing to make a decision by June on the rulemaking, I understand. Apparently you feel compelled to roll back the standards in time for the 1986 new cars. What is the big rush?

Answer: The Ford and GM petitions were filed with a relatively short time remaining before the start of the model year to which the petitions apply. It is our practice to attempt to respond to rulemaking petitions in a timely manner. The Ford and GM petitions relate to the 1986 model year, so we intend to complete any action in response to the petitions before the start of that model year. Chrysler has questioned the timeliness of the Ford and GM petitions. These comments are under review and will be addressed in the Department's decision on whether to propose a revised standard for model year 1986.

Minority Question 7: Didn't Congress amend EPCA in 1980 to allow the manufacturers to take advantage of their exceeding the standard in the three prior years and if necessary miss the standard in a given year and make up for it in the succeeding three years? Would you explain how this works, and why this 1980 EPCA amendment wasn't enough?

Answer: The 1980 amendment to EPCA (Public Law 96-425, 94 Stat.1821), allows a manufacturer both to carry forward credits from the three model years preceding a model year in which it fails to meet the standard and to carry back credits from the three years following that year. General Motors and Ford have already availed themselves of carry-forward credits from earlier model years. At one time, it was their position that the combination of carry-forward and carry-back credits would be sufficient to offset any shortfall in the intervening years. In their petitions for reduction of the passenger car fuel economy standard to 26.0 mpg, they now contend that the reduced demand for fuel-efficient cars will result in their CAFE levels being so far below the 27.5 mpg standard that they will exhaust all available credits. This situation was not forecast at the time of the 1980 amendments.

Minority Question 8: It has been suggested that the Administration agreed to roll back the CAFE requirements in partial compenstion for the fact that the Administration agreed to ending the voluntary restraint agreement. Is there any truth to this?

Answer: .The two matters are separate, and there is no commitment to revise the fuel economy standards. Our decision on the pending Ford and GM petitions will be based solely on the four criteria spelled out in the Cost Savings Act for determining maximum feasible average fuel economy.

Minority Question 9: You acknowledge in your statement on page 3 that "...manufacturers may, to some extent, influence demand through their marketing and pricing strategies." Do you think that in determining the maximum feasible fuel economy that the manufacturers should be expected to exercise their influence to some extent through marketing and pricing strategies to ensure that fuel efficient vehicles are sold?

Answer: The Department believes that such efforts are contemplated under the statute, as long as they are economically practicable. Manufacturers must make good faith efforts to encourage consumers to purchase fuel-efficient vehicles. However, this does not mean that manufacturers must employ marketing and pricing strategies that would result in severe adverse effects on competition, sales, and employment. In past rulemaking proceedings, the Department has recognized that standards should not be set so high as to necessitate manufacturers using compliance methods that would result in a substantial sales drop. Nor do we believe that manufacturers are prohibited from advertising their less fuel-efficient cars, as some have implied. We believe that making a good faith effort to sell fuel-efficient cars means that manufacturers should take those reasonable marketing actions available to encourage purchase of such vehicles, regardless of whether those steps would have been taken absent the fuel economy standards.

Minority Question 10: In December, 1984, didn't GM submit a compliance plan to NHTSA for MY 1984 which explains how GM will exceed the 27.5 mpg standard for MY 1985-1988, so as to make up for the carryback credits. Yet three months later they petitioned NHTSA arguing that the standard for 1986 and thereafter must be rolled back. Isn't there a contradiction here? Why not?

Answer: GM's MY 1984 carryback plan, submitted on November 27, 1984, included projections of 25.0 mpg for MY 1985 and 26.2 mpg for MY 1986. (The 1986 projection included the GM-Toyota joint venture car in GM's domestic CAFE: an exemption would be necessary for this to occur. Without the joint venture car, GM's projection would have been 26.0 mpg.) The company's projection for MY 1987 is confidential. However, because 1987 is the last model year from which credits could be carried back to model year 1984 shortfalls, it is clear that GM was relying on MY 1987 credits when it prepared its November 1984 carryback plan. In its March 1, 1985 petition, the company projected its MY 1985 CAFE to be 25.1 mpg and its MY 1986 CAFE to be 25.7 mpg (without considering the joint venture car). Thus, GM's CAFE estimates for model years 1985 and 1986 changed relatively little over that 3-month period.

We do not believe there is any contradiction between GM's carryback plan and its petition. GM has argued that, in setting fuel economy standards for the post-1985 period, NHTSA should set standards at a level where manufacturers can be sure of generating sufficient carryback credits to compensate for shortfalls in earlier model years. The agency is evaluating this argument as part of its decisionmaking process for the post-1985 fuel economy petitions.

Responses of General Motors Corporation to Questions from the Senate Subcommittee on Energy Regulations and Conservation with Respect to GM Testimony at a Hearing on Fuel Economy, May 14, 1985.

Submitted -- June 19, 1985

Q. You have commented that CAFE requirements are technology-forcing. What assurances can you give this Subcommittee that GM would continue its present level of investment in, and application of, new fuel-efficiency technologies should a reduction of the 27.5 mpg standard occur?

A. GM has vigorously exploited the economically practicable technologies that can provide better fuel economy in our cars. These include 3 and 4 speed automatic transmissions with converter clutches, improved aerodynamics, tires with reduced rolling resistance, significant weight reduction, etc. Our commitment to fuel efficiency is evident by our continuing research, our progress to date and projects like Saturn for the future. Saturn is GM's "clean sheet" effort to develop innovations to enable it to produce small cars in the U.S. With an initial capitalization of $150 million, Saturn Corporation is a new wholly-owned subsidiary of GM that will eventually have total assets of around $5 billion. The cars produced by Saturn Corporation will be smaller and lighter than the present GM J-cars, but have comparable interior room. With all-new engines and transmissions, the cars will be highly fuel-efficient. Moreover, GM is continuing to develop vehicles capable of operating on alternate fuels, including methanol.

Follow up:

Q. Are there other technological directions toward fuel efficiency that a reduction in CAFE standards might facilitate (i.e. alternate fuels)?

A. Such a reduction can facilitate technological improvements to the extent that it frees or generates engineering and economic resources. Availability of funds and engineering talent will allow full-line manufacturers to continue development and testing of higher fuel economy gasoline engines, of alternate fuel vehicles and to modify current vehicles to be more compatible with alcohol-gasoline blends.

GM has already reported programs involving methanol-fueled passenger cars[1] and heavy-duty engines[2]. In addition, we have agreed to retrofit three transit buses with methanol-fueled engines for the California Air Resources Board. These are the types of programs which can be accomplished with adequate economic and engineering resources.

[1] R.A. Potter, "Neat Methanol Fuel Injection Fleet -- Alternative Fuel Study," Fourth Washington Conference on Alcohol, November, 1984.

[2] R. A. Toepel, J. E. Bennethum, and R. E. Huruth, "Development of Detroit Diesel Allison 6V-92TA Methanol Fueled Coach Engine," SAE Paper 831744

Q. In your experience, have CAFE standards encouraged technological developments with equal applicability throughout your fleet?

A. Prior to the first oil embargo and prior to the CAFE standards, GM had initiated plans to improve the fuel economy of its product line based upon what it expected from future market demand. In most cases, where economically practicable, fuel economy improving technology is implemented across all car lines. As noted earlier, fuel economy is a marketable attribute. Such items as reduced weight, improved aerodynamics, 4th generation radial tires with reduced rolling resistance, electronic ignition, improved air conditioning compressors reduced engine parasitic losses and converter clutches on all automatic transmissions have been applied across all car lines. Some items of technology such as fuel injection and front wheel drive have been applied to most car lines and across all size categories.

Q. If not, how much is that a result of management decisions versus technological difficulty?

A. See page 3.

Q. In your statement, you asked that Congress consider whether additional forms of flexibility in CAFE requirements should be enacted into law. First, does that indicate that GM considers some form of Federal regulation of automobile fuel efficiency desirable, and second, what specific suggestions would you make for added flexibility in the current statutes?

A. Our comment does not suggest that federal regulation of fuel economy is either desirable or necessary. By flexibility, we mean to consider additional means in the law whereby CAFE compliance with the current standard (i.e., no penalties) could be achieved without adversely affecting energy conservation. For example, elimination of the time limit for carry-forward credits and lengthening the time for carry-back credits. (At a minimum, five years would appear to be reasonable.) If fuel has been saved in any year beyond what would result from meeting the standard, the savings should continue to be recognized. If such a provision were enacted, GM might not now be petitioning to lower the standard, as we forfeited $400 million in credits for years prior to 1982 merely by the passage of time.

Q. Failure to comply with the standards after applying carry-forward and carry-back credits constitutes "unlawful conduct." Your statement indicates that GM does not consider the payment of civil penalties to be a reasonable alternative because it would place GM in violation of the law. Without a reduction in the standard, your company would choose, instead, to restrict production of some of its best-selling cars. AS GMC's chief economist, would you tell this Subcommittee what the projected impact of such a decision would be?

A. There would be a multiple impact if General Motors is forced to restrict production of some of its best selling cars. First, it would lead to an immediate reduction in the number of General Motors employes, a reduction in the number of people employed by GM's suppliers, and eventually a reduction in the number of people distributing General Motors cars. The Department of Commerce has estimated that between 80,000 and 110,000 auto industry and supplier jobs would be lost if Ford and GM reduced production by between 750,000 and one million units due to the current CAFE standard, and this number does not include lost distribution jobs.

Second, General Motors will incur losses from restricting production of its best selling cars, undermining GM's ability to invest in the more efficient products and processes needed to compete.

Third, preventing GM from selling larger, family-sized cars will permit foreign automakers to increase their sales in the portion of the auto market in which both General Motors and Ford traditionally have been the strongest competitors.

Fourth, CAFE-induced fuel conservation will not be significant because many GM consumers will switch to the less fuel-efficient trucks or larger foreign cars or hold on to older cars that are also less fuel-efficient.

Finally, such CAFE forcing would result in higher prices to consumers for a mix of cars that was less suited to their need.

The magnitude of these consequences cannot be predicted with any accuracy at this time, the extent of the product restrictions will depend on market factors as well as GM's CAFE positions at that time.

Q. How does that compare with what GM could expect to pay in penalties?

A. As stated in the testimony of May 14, "...there's no question that the actions (restrictions) we would have to take would be more expensive to us than paying the fines." (Transcript, page 106.)

Nevertheless, as the NHTSA has noted, under the law, failure to comply with the standards after applying credits constitutes "unlawful conduct." Accordingly, GM cannot and does not consider the payment of civil penalties to be a reasonable alternative for determining its long-term compliance strategies.

Q. Would either of these two courses -- restriction of production or payment of large civil penalties -- prove equally repugnant to your stockholders?

A. Even if it is assumed that a manufacturer is free to choose between these courses of action, GM is unaware of any reliable means of predicting or quantifying the degree of adverse stockholder reaction in either case. However, GM must be concerned with the risks of stockholder dissatisfaction with production restriction because of our position that GM cannot and does not consider the payment of civil penalties to be a reasonable alternative for determining its long-term compliance strategies.

We believe that our stockholders will appreciate the necessity to obey the law and that current efforts to obtain amendment of the standard under the law are in their best interests. Should those efforts fall short, we would hope that GM stockholders would understand that a decision to restrict production was taken to avoid engaging in "unlawful conduct."

Q: Many of those who oppose a reduction in fuel economy standards argue that GM and other manufacturers have ignored the CAFE standards, and as a result, have failed to comply. What steps has GM taken, since the enactment of EPCA, to improve the fuel economy of its vehicles?

A. Even before the enactment of EPCA and the first oil embargo, GM began to redesign its products based on our assessment of future market demand. Those early plans enabled GM to meet or exceed the standards every year through 1982. As fuel became plentiful and prices declined, consumers' purchasing preference moved toward family-size vehicles and/or vehicles with larger engines. While we retained some of our older RWD vehicles because of customer demand, we continue to introduce new, more fuel-efficient FWD vehicles and expect to have completely redesigned our entire product line, for the second time since the enactment of EPCA, by the end of the decade. The attached list outlines GM progress in fuel economy to meet market demand. Other improvements were noted in response to an earlier question.

General Motors Progress in Fuel Economy

In early 1973, before the oil embargo, General Motors began an ambitious product program to improve its fleet fuel economy by redesigning its passenger cars and introducing entirely new models. While improving fuel economy was and continues to be a major goal of the program, GM has long recognized the necessity of satisfying the great variety of needs of our customers as reflected in the marketplace. The resizing of GM cars has been an integral part of the redesign program. The first four such programs completed were already well advanced by late 1975, when fuel economy standards were established by Congress. Although declining slightly in 1982, GM's new car fleet fuel economy increased 101% from 1974 to 1983.

Using the 12.0 miles per gallon (mpg) corporate average fuel economy (CAFE) determined by the Environmental Protection Agency as a 1974 baseline for GM, the major milestones in GM's product program have been as follows:

- In the 1975 model year, GM introduced catalytic converters on all of its passenger cars. The catalytic converter enabled recalibration of all engines and drivetrains for optimum fuel economy while meeting the stringent exhaust emission standards. In 1975, GM's CAFE increased 28% to 15.4 mpg.

- For the 1976 model year, GM introduced two entirely new models -- the Chevrolet Chevette and the Cadillac Seville. The subcompact Chevette, with its excellent fuel economy, was the largest selling subcompact in the U.S. On July 19, 1979, the one millionth Chevette was produced less than four years after its first introduction. In 1976, GM's CAFE increased to 16.7 mpg, an improvement of 39% over 1974.

- For the 1977 model year, GM introduced a complete line of redesigned full-size cars including the Chevrolet Impala and Caprice, the Pontiac Catalina and Bonneville, the Buick LeSabre and Electra, the Oldsmobile Delta 88 and Ninety-Eight, and the Cadillac DeVille and Fleetwood. These cars weighed about 700 pounds less and achieved about 3 mpg better fuel economy than their predecessors yet retained their interior roominess. The redesign program for these cars was started in January 1973, nearly a year before the oil embargo, and was completed at a tooling cost of about $1.1 billion. In 1977, GM's CAFE improved to 17.8 mpg, a cumulative improvement of 48% compared to 1974.

- For the 1978 model year, GM introduced its redesigned intermediate-size cars which included the Chevrolet Malibu and Monte Carlo, the Pontiac Lemans and Gran Prix, the Oldsmobile Cutlass and Cutlass Supreme and the Buick Century and Regal. The results of this program were similar to the 1977 program including a 3 mpg improvement in fuel economy with about 600 pounds weight reduction. This redesign program began in the spring of 1974. In addition, GM introduced diesel engines in full-size Oldsmobiles. In 1978, GM's CAFE increased again by more than 1 mpg to 19.0 mpg. Compared to 1974, the cumulative improvement was 58%.

- For the 1979 model year, GM introduced its front-wheel-drive Oldsmobile Toronado, Buick Riviera and Cadillac Eldorado. This program, which was underway by late 1975, resulted in a weight reduction for these cars of about 1000 pounds while retaining or increasing interior room. The fuel economy of these cars improved by about 4 mpg. GM's CAFE improved only modestly in 1979 to 19.1 mpg, a cumulative improvement of 59% over 1974. Much of the expected fuel economy improvement was lost as a result of changes EPA made in the test procedures for measuring fuel economy.

- In April of 1979, GM introduced its 1980 model year 'X' series, the Chevrolet Citation, Pontiac Phoenix, Buick Skylark, and Oldsmobile Omega. The program to redesign these cars was started in February of 1975. At that time, this redesign program was the largest of its type ever undertaken by GM at a cost of $1.7 billion. Changing the basic car to transverse front-wheel-drive and other weight savings innovations resulted in an 800 pound weight reduction while maintaining or improving interior room. Compared to the models they replaced, these new cars achieved about 6 mpg better fuel economy. The customer response to the 'X' cars was so favorable that more than 1.5 million were sold by May 1981.

Also for the 1980 model year the full-size Chevrolets, Pontiacs, Buicks, Oldsmobiles and Cadillacs, which were redesigned for 1977, underwent further weight reduction of about 100 pounds, improvements in aerodynamics, reduced rolling resistence tires, and engine downsizing to further improve their fuel economy by about 1½ mpg. GM redesigned the Seville, which was introduced in 1976, to front-wheel-drive similar to the Eldorado and to include a diesel engine as standard equipment GM's CAFE for 1980 was 21.9 mpg, a cumulative improvement of 83% compared to 1974.

- For the 1981 model year, GM introduced the Computer Command Control (CCC) emissions system on its gasoline engine powered passenger cars nationwide. In this sophisticated system the computer enables engines to meet the very stringent exhaust emission standards with improved fuel economy and good driving characteristics. The CCC system required a capital investment of about $3/4 billion. Additional fleet fuel economy improvements result from using more diesel engines, more 6 and 4 cylinder gasoline engines, the use of torque converter clutches in more transmissions and the use of four-speed automatic transmissions. In April of 1981, GM introduced the subcompact Pontiac T-1000 and expanded the availability of diesel engines to the Chevrolet Chevette. GM's CAFE for 1981 was 23.2 mpg. This was an improvement of 1.3 mpg over 1980 and a cumulative improvement of 93% compared to 1974.

- In May of 1981, GM introduced its 1982 model year compact 'J' series, the Chevrolet Cavalier, Pontiac J-2000 and Cadillac Cimarron. The program to design these cars was begun in late 1977, well before the 1979 market shift to more fuel-efficient cars. In March of 1982, availability was expanded to include the Buick Skylark and the Oldsmobile Firenza.

In January of 1982, GM introduced its new front-wheel-drive intermediate-size series, and redesigned subcompact sporty series, both as 1982 models. The new intermediate-size Chevrolet Celebrity, Pontiac 6000, Buick Century and Oldsmobile Ciera incorporate transverse front-wheel-drive, low aerodynamic drag, 4 and 6 cylinder gasoline engines.
The redesign program for the subcompact Chevrolet Camaro and Pontiac Firebird achieved about 600 pounds weight reduction and improvements in aerodynamic design.

Also for the 1982 model year, additional fleet fuel economy improvements had been expected from the introduction of a new, lightweight 4.1 L gasoline engine in Cadillac models, expanded use of throttle body injection on gasoline engines, a new 4.3 liter V6 diesel engine and a new 3.0 V6 light-weight gas engine, increased use of diesel engines and expanded use of improved automatic transmissions including a new 4-speed overdrive with lock-up converter clutch.

Throughout 1982, the real price of fuel declined substantially from the peak of early 1981, and new car buyers did not purchase as many, or as highly, fuel-efficient cars as GM had planned to produce. The decline in sales of its more fuel-efficient cars forced GM to close two assembly plants recently converted for the production of these two new 1982 model year front-wheel-drive cars. GM's CAFE for 1982 was 24.2 mpg. This was an improvement of 1.0 mpg over 1981 and a cumulative improvement of 102% over the 1974 model year.

- As economic conditions worsened, overall sales continued to decline and forced GM to delay a major redesign program planned for the 1983 model year until 1984. At the start of the 1983 model year, the combined effects of the recession and the continued declining sales of fuel-efficient cars forced GM to close two additional assembly plants that had also recently been converted to produce fuel-efficient cars. Also, stable fuel prices, the perceived availability of adequate supplies of fuel and the economic recovery in late 1983, led to an increase in demand for GM's larger vehicles and engines. Consequently, GM's 1983 model year CAFE was 23.5 mpg, a shortfall of 2.5 mpg below the CAFE standard of 26.0 mpg. GM used CAFE credits from the 1980 model year to offset the 1983 CAFE shortfall.

  The remaining $122 million in 1980 credits not used to offset the 1983 CAFE shortfall was lost due to the three-year limitation on carryforward/carryback credits. These lost credits are in addition to the $263 million lost from 1978 and the $25 million lost from 1979 due to this limitation. This represents a cumulative loss of $410 million in CAFE credits.

- In April 1984, GM introduced its new 1985 model year front-wheel drive "C" series, Buick Electra, Cadillac Deville and Oldsmobile Regency. The combined highway/city fuel economy for these downsized vehicles is 23.0 mpg, 2.0 mpg greater than their rear-wheel drive predecessors. Also, for the 1984 model year GM introduced its all-new "P" car (Pontiac Fiero), which has a combined fuel economy of 33 mpg, a new mid-size front-wheel-drive station wagon with improved fuel economy of 1.5 mpg over its predecessor and a new redesigned light-weight Corvette.

  However, the continuing abundance of fuel and declining gas prices during 1984 resulted in continued strong demand for GM's larger vehicles and engines. Consequently, GM projects its 1984 model year CAFE will be 24.5 mpg, 2.5 mpg below the 1984 standard of 27.0 mpg. The shortfall will be offset by fuel economy credits earned in model years 1981 and 1982 when GM exceeded the standards, and the utilization of the three-year carryback provision provided for in EPCA.

- For the 1985 model year, GM introduced the all-new front-wheel drive compact "N" series, the Buick Somerset, Oldsmobile Calais and Pontiac Grand Am (combined fuel economy of 29.0 mpg). Anticipating a continued strong demand for its larger vehicles, GM's 1985 Pre-Model Year Report to NHTSA (filed December 19, 1984) projects a 1985 CAFE of 25.1 mpg, 2.4 mpg below the 1985 standard of 27.5 mpg. If GM's 1985 projected CAFE is unchanged at the end of the model year, the shortfall will be offset by projected future fuel economy credits from 1988.

From 1974 to 1984, GM invested over $40 billion for new products, plants and equipment. Looking to the future, GM plans to invest approximately $5 billion in the newly created Saturn Corporation. Saturn's goal is to establish new ways of producing high-quality, lower cost vehicles to compete with overseas producers. With all new engines and transmissions, these vehicles will be highly fuel efficient.

Q. How does the fuel economy of GM products compare with that of vehicles produced by other manufacturers?

A. GM products compare very well with other manufacturers. For example, an analysis of EPA's 1985 Industry Fuel Economy Data (available as of May 14, 1985) shows that for cars available with four speed automatic transmissions GM has the highest fuel economy vehicle in seven weight classes. Toyota has the highest in four weight classes. No other manufacturer was highest in more than one weight class.

Compared specifically to Chrysler Corporation:

-- With the equivalent of Chrysler's sales mix GM would have a 1985 CAFE of about 28.5 mpg as compared to Chrysler's 27.5 mpg.

-- Within each EPA test weight class for gasoline engines and comparable transmissions, GM has the highest fuel economy of any manufacturer in 26 weight/transmission classes while Chrysler is highest in one.

-- In the thirteen weight/transmission classes where GM and Chrysler compete directly, Chrysler has the higher fuel economy vehicle in two (2) classes while GM has the higher fuel economy vehicle in eleven (11) classes. Importantly, this comparison does not take into account GM's greater fuel economy advantages attributable to diesel engines and automatic 4 speed overdrive transmissions, which Chrysler does not offer.

Q. In petitioning in March for a reduction of the CAFE standard for passenger cars in Model Year 1986, both Ford and GM were aware that each phase of the rulemaking, if the petitions were granted, would have to be shortened. Why were the petitions not filed earlier?

A. First, the only specific prior knowledge that GM had regarding time constraints was a NHTSA interpretation indicating that petitions for reduction in the standard must be filed at least six months before the beginning of the model year to which the amended standard is to apply. There has been no quarrel that the GM and Ford petitions met this "deadline." Thus, in the absence of any preexisting formal schedule for agency rulemaking, the time that the GM petition was filed was not understood to be an issue. Indeed, by not providing for a filing deadline, Congress presumably was encouraging manufacturers not to file until it was clear such relief would be required.

Second, as indicated in testimony already provided to the Subcommittee by GM (e.g., Tr. 115, ll. 21-25-116, ll. 1-13) and Ford (e.g., Tr. 130, ll. 12-21) and as set forth in GM's petition (Petition at 2), the decision to petition was not made lightly. GM's petition was the product of an ongoing review process that, as the March 1 "deadline" approached, ultimately lead to the conclusion that the uncertainties in our projections and the risks that those projections would not materialize were simply too great to permit GM to disregard the availability of a statutory mechanism for reassessing the feasibility of the 27.5 mpg standard.

In sum, there are no "procedural defects" in the timing of GM's petition. The petition was filed within the time contemplated by the NHTSA and the grounds upon which it rested were fully set forth in the text.

Q. The Department of Commerce, in commenting to NHTSA on the Ford and GM petitions for a reduction in the standard, stated that "the shift in consumer demand toward less fuel-efficient cars and other unforeseen developments since 1981 have eliminated the ability of full-line U.S. car manufacturers to apply the complete range of fuel-saving technology they have developed." Would you tell the members of this Subcommittee what, if any, available fuel-saving technologies have been curtailed or delayed in implementation?

A. Even though the shift in consumer demand started in 1981, GM still exceeded the standards in MY 1982. The unforeseen developments that curtailed implementation of fuel saving technologies were the recession and high interest rates which, in turn, reduced car sales and reduced funds available for investments necessitating delays in introduction of new car programs.

Initially, we believed most of our vehicles would have been redesigned for the second time by 1984. That date now has been delayed three years to 1987.

While most of the technology envisioned in 1977 for MY 1985 has been introduced, CAFE standards are not being achieved because of changes in consumer preference which have resulted in strong market demand for family-size cars. Even though we have continued to introduce new fuel efficient FWD vehicles with the intention of eliminating the RWD models they were to replace, market demand has extended their production life-cycle and provided numerous jobs which otherwise might not have existed. Market demand for these vehicles has remained strong partially because their fuel economy has been dramatically improved over their mid-1970's counterparts.

Q. Would you provide this Subcommittee with the analyses conducted to determine that a 1.5 mpg reduction in the standard versus a 1.0 mpg or a 0.5 mpg reduction would be necessary to comply with the maximum feasibility principle?

A. The determination is not susceptible to a precise mathematical equation because of uncertainties affecting projections of future events and conditions. Ultimately, the NHTSA must make a reasoned judgment regarding maximum feasibility pursuant to the four criteria of EPCA Sec. 502(e) using the best available information.

The excessive stringency of the current standard is demonstrated in the analysis provided in the GM petition. The analysis shows the combined effects of dramatic changes in circumstances in the decade since enactment of the 27.5 mpg Congressional target.

Accordingly, GM believes that the most appropriate reconciliation of extremely serious economic practicability issues with the interest in preserving a reasonable approach to energy conservation can be achieved by exercising the maximum flexibility that Congress saw fit to provide in authorizing amendment to the 26 mpg level.

Q. The Department of Commerce has suggested that, pending introduction of new, more fuel-efficient large car models in later years, Ford and GM might consider relocating production of some existing large car volume to foreign locations, a strategy that would shift some large cars to the import fleet of domestic manufacturers where CAFE levels are expected to be quite high. Are Ford and GM considering such a move?

A. Relocating the production of some of our existing large cars to foreign locations would transfer these vehicles into the import CAFE fleet. Because of lead time considerations, this would not be a viable short-term option. Although no decisions have been made at this time by General Motors to resort to this extreme measure, it does remain a possible option for the longer term which could be considered if the demand for these types of products were to persist and no other means were available to meet this demand.

We of course have no knowledge as to Ford's future product plans.

Follow up:

Q. Under what conditions would such a move occur and what would be the impact on employes at U.S. plants?

A. See page 14 regarding "conditions". See page 6 regarding "impact on employes." Importantly, if the CAFE standards force such a move, the vehicles would continue to be available to consumers needing them, and there would be no reduction in fuel consumption even though it would improve the domestic fleet CAFE.

Q. In your petition for rulemaking, didn't you call for a rollback to 26 miles per gallon and for all time thereafter? Why didn't you limit the rollback to a specific number of years?

A. Because of future uncertainties regarding such factors as oil prices, competitive actions and the state of the economy, it would be difficult if not impossible to specify some later date when the standard might again be considered for change. At page 1 of its Petition, GM expressly encouraged NHTSA, in the event that the standard is amended as requested, to conduct a periodic review of whether subsequent events might dictate future rulemaking to raise the standard.

Q. Aren't you in your petition asking the Government in effect to agree that the national security concerns about oil supplies, which gave rise to EPCA and other energy laws, are now unjustified?

A. GM has not sought amendment or repeal of EPCA, advocated abandonment of energy conservation as a national policy or condoned energy profligacy. Rather, as specifically provided for by Congress, GM simply has asked the NHTSA to examine whether a 1.5 mpg decrease in the passenger car CAFE standard might reflect a better accommodation of all of EPCA's goals.

The quoted statement from GM's petition summarized approximately five preceding pages of the petition containing an analysis of the progress that has been made since the early 1970s in reducing U.S. energy dependence on unstable sources of petroleum. The point of the statement, as well as the petition as a whole, is that the conditions of that era are not today's conditions.

The national security concerns about oil supplies that gave rise to EPCA derived largely from the harmful economic effect of restricted Middle East oil supplies and the attendant price increases. The initial response of artifically holding U.S. prices down, and increasing taxes on oil companies, resulted in increased U.S. oil consumption and reduced U.S. oil production -- the very opposite of the intended result. When, in 1981, prices were decontrolled, consumption fell and production increased, bringing the market into balance.

We now have the situation where Saudi Arabia, the Middle East's largest and most important producer, has reduced its production from ten million barrels per day to about 3 million. The "loss" of seven million barrels did not cause a sharp price increase; in fact the

Saudi's cut in production is an attempt to try to keep prices from falling further! OPEC as a whole decreased petroleum output by over 13 million barrels per day from 1979 to 1985 as prices have fallen. Surely the perceptions of 1975 when EPCA was enacted are very different from today's reality. The world-wide reduction of oil prices and reduced dependence on the Middle East mark a basic change in the oil industry, and this should be taken into account in formulating energy policies.

Furthermore, if national security means energy independence, then it should be noted that we have abundant coal supplies. Coal, or almost any hydrocarbon, can be converted into methanol, which can make an acceptable automotive fuel. Thus, methanol may be the long-term solution, and GM is actively researching this option.

Accordingly, the degree of concern regarding the impact of oil supplies on national security that existed when EPCA was passed is no longer appropriate, particularly when balanced against other important considerations. Moreover, even if the progress of the past decade is ignored the effect of the requested amendment would be negligible in preventing or postponing the consequences of such a hypothetical situation. We estimate the amendment to the standards would increase gasoline demand by about two tenths of one percent per year. In fact, maintenance of the CAFE standard at current levels is not the way to insure against such a supply disruption because it reduces the competitiveness of our full-line producers, and thus reduces our ability to finance and engineer further fuel-efficiency gains. For further detail, please see pp. 27-32 of the GM Petition.

Q. How much of the world's proven petroleum reserves are located in the Mid East -- something over 60% isn't it? Do you feel that the Mid East has become tranquil enough that we don't have to worry about political or religious upheavals there?

A. The United States no longer purchases a significant quantity of oil from this portion of the world. In fact, domestic consumption of oil from the Persian Gulf countries has dropped from 14 percent to 3 percent since 1977. Therefore, these concerns affect only a small portion of domestic consumption and do not present the significant problem they did over ten years ago when EPCA was enacted.

In addition, perhaps 50 percent of oil today is traded on the spot market in contrast to virtually none in 1975. This is a significant factor for stability. In 1975, for example, if one million barrels per day were interrupted, market participants would bid up prices on the spot market to purchase that amount from a very small spot supply. Today, that same one million barrels per day interruption would be easily accommodated on the spot market, because the spot market's volume is much larger. For evidence of this, note that Iran and Iraq continue at war, and the resulting sinking of tankers or bombing of major refineries cause hardly a ripple. Of course, the major increase in non-OPEC petroleum supply combined with the existence of excess production capacity outside the Middle East radically changes the situation. Supply interruptions in the Persian Gulf area are not apt to present the serious problems of the past as developments on the spot market indicate

The Strategic Petroleum Reserve also provides a buffer against interruptions of most plausible magnitudes, and is something the U.S. did not possess at the time of EPCA's enactment.

Finally, our unutilized capacity for small, fuel efficient cars provides additional stability to the national economy.

Q. Here is a quote from a book entitled, "The Future of the Automobile" which is a report of MIT's International Automobile program, "Because new automobile designs require about 5 years to bring to market, will typically continue in production for 6 - 8 years, and will be driven by motorists for 12 or more years after leaving the factory, it is apparent that automobiles designed in 1984 will still be in use in large numbers in the year 2010." What do we know about the energy situation of this country in the year 2010? Would you agree with this statement?

A. In 1975, when EPCA was enacted, neither consumers, automobile manufacturers, nor the government knew what the exact energy situation would be just 10 years later in 1985. That remains true today looking ahead to 1995 or 2010. It is highly probable, if today gasoline price forecasts are generally correct, that some of the vehicles designed for production in the mid-1990's will be operating in 2010.

There are significant costs associated with both under-reacting and over-reacting to any potential change in energy availability. Those that have the most to gain or lose are the purchasers of the new automobiles and the automobile companies. It is in the interest of both to provide cars that reflect the best estimate of energy availability, not the most extreme estimate.

The automobile makers realize that consumers value fuel-economy, especially since the price of gasoline has been allowed to fluctuate with market conditions. Therefore, automobile manufacturers will continue to strive to improve fuel efficiency across all model lines.

Q. Can you tell us specifically what GM will do if the NHTSA denies your petition? What plants will you close or shutdown? How many workers will lose their jobs?

A. Only after exhausting all reasonable options will General Motors consider closing plants because of the need to restrict product availability for the purpose of complying with the fuel economy standard.

If it appears that we cannot otherwise comply and it becomes necessary for GM to restrict production, we would obviously have to consider as candidates for production restrictions any vehicle with a fuel economy below the standard. An exact determination of the particular plants that GM would shutdown would require an exact prediction of the market conditions at some indeterminate time in the future. Therefore, no exact answer to this question is possible at this time.

However, shown below is a list of GM passenger cars which would have to be considered candidates if production restrictions are required.

Car Line	Example
C	98 Regency
B	Impala
G	Monte Carlo
E	Toronado
F	Camaro
Y	Corvette
D	Fleetwood
H	Delta 88

Attached is a list of plants, their locations and the products that are planned for production in model year 1986 that could be affected as a result of restricting the production of the car lines shown above. This list includes component supplier plants as well as assembly plants.

Plant	Location	Product
Saginaw Steering	Athens, AL	Steering pumps, gears, columns
Delco Remy	Anaheim, CA	Batteries
CPC	Van Nuys, CA	F-car assembly
New Departure - Hyatt	Bristol, CT	Bearings, spindles
CPC	Wilmington, DE	B-car assembly
Delco Remy	Albany, GA	Generators
Delco Remy	Fitzgerald, GA	Batteries
BOC	Willow Springs, IL	Stampings
Central Foundry	Danville, IL	Grey iron castings
Central Foundry	Bedford, IN	Castings
CPC	Marion, IN	Stamping
Delco Electronics	Kokomo, IN	Auto sound systems
Delco Remy	Anderson, IN	Batteries
Delco Remy	Muncie, IN	Batteries
Fisher Guide	Anderson, IN	Auto lighting bumper systems
BOC	Fairfax, KS	B-car assembly
CPC	Bowling Green, KY	Chevrolet Corvette assembly
Fisher Guide	Monroe, LA	Car and truck lamps
Delco Remy	Meridian, MS	Electric starters
Packard Electric	Brookhaven, MS	Cable, conduit
Packard Electric	Clinton, MS	Cable, conduit
AC Spark	Flint, MI	Spark plugs, filters, fuel pumps
BOC Buick	Flint, MI	FWD B and H-car assembly
BOC Cadillac	Detroit, MI	C-car assembly
BOC Cadillac	Livonia, MI	Engine components
BOC	Hamtramck, MI	E-car assembly

BOC Fisher	Flint, MI	Misc. auto parts
BOC Fleetwood	Detroit, MI	D-car assembly
BOC	Grand Blanc, MI	Stamping
BOC	Kalamazoo, MI	Stamping
BOC Olds Main	Lansing, MI	G-car assembly
BOC	Orion, MI	C-car assembly
BOC	Willow Run, MI	H-car assembly
Central Foundry/Nodular Iron	Pontiac, MI	Castings
Central Foundry	Pontiac, MI	Adminis.
Central Foundry	Saginaw, MI	Castings
Central Foundry	Saginaw, MI	Castings
CPC	Adrian, MI	Plastic auto parts
CPC	Bay City, MI	Auto components
CPC Engine	Flint, MI	Engines
CPC Pressed Metal	Flint, MI	Stampings
CPC Metal Fab	Grand Rapids, MI	Stampings
CPC	Livonia, MI	Springs and bumpers
CPC	Pontiac, MI	G-car assembly
Fisher Guide	Flint, MI	Stamping
Fisher Guide	Detroit, MI	Stamping
Hydra-Matic	Three Rivers, MI	Transmissions
Hydra-Matic	Warren, MI	Wheels, steering components
Hydra-Matic	Willow Run, MI	Transmissions
Inland	Grand Rapids, MI	Interior trim
Inland	Livonia, MI	Interior trim
Inland	Tecumseh, MI	Interior trim

New Departure - Hyatt	Detroit, MI	Forging
Rochester Products	Coopersville, MI	Machine parts
Rochester Products	Grand Rapids, MI	Precision parts, valve lifters
Saginaw Steering	Detroit, MI	Steering components
Saginaw Steering	Saginaw, MI	Steering mechanisms
BOC	Wentzville, MO	C-car assembly
Delco Remy	New Brunswick, NJ	Batteries
Fisher Guide	Trenton, NJ	Auto parts
Central Foundry	Massena, NY	Aluminum auto parts
CPC	Tonawanda, NY	Forgings
Delco Products	Rochester, NY	Electric auto parts
Fisher Guide	Syracuse, NY	Plastic trim
Harrison Radiator	Buffalo, NY	Air conditioning components
Harrison Radiator	Lockport, NY	Radiators and components
New Departure - Hyatt	Tonawanda, NY	Forgings
Rochester Products	Rochester, NY	Carburetors
Saginaw Steering	Buffalo, NY	Steering components, RWD axles
BOC - Fisher	Lordstown, OH	Stampings
Central Foundry	Defiance, OH	Engine blocks
CPC	Hamilton, OH	Stampings
CPC	Mansfield, OH	Stampings
CPC	Norwood, OH	F-car assembly
CPC	Parma, OH	Pressed metal
Delco Moraine	Dayton, OH	Brake systems
Delco Products	Dayton, OH	Shock absorbers, wiper systems
Fisher Guide	Columbus, OH	Misc. auto parts

Fisher Guide	Elyria, OH	Misc. auto parts
Harrison Radiator	Dayton, OH	Air conditioners, compressors
Hydra-Matic	Toledo, OH	Transmissions
Inland	Dayton, OH	Seats, trim
Inland	Euclid, OH	Soft trim
New Departure - Hyatt	Sandusky, OH	Bearings
Packard Electric	Warren, OH	Wiring harnesses
BOC	Pittsburgh, PA	Stampings
CPC	Arlington, TX	G-car assembly
AC Spark Plug	Wichita, TX	Exhaust sensors

* * * *

6/13/85

Q. Why would you shut these plants down rather than pay the civil penalties? Won't you be costing the Corporation much more by not selling your most profitable cars than if you paid the civil penalties?

A. Please refer to Tr. 87, ll. 7-12 and 105-106, l. 21.

Q. Is there a possibility that a stockholder derivative suit would be brought against you because you chose the course of action that costed the company the most money -- drastically curtailing production of your most profitable car lines?

A. Such a possibility cannot be ruled out. Please refer to GM's answer to a similar question on page 9.

Are you familiar with the 1977 RSP Fuel Economy Projections that NHTSA provided to your company on April 12, 1985, under a cover memorandum from L. Robert Shelton of NHTSA, which compares GM's current fuel economy projections for model year 1985 to the one made by NHTSA for model year 1985 when the agency established passenger automobile fuel economy standards in 1977? That report says, "The primary reason why GM's present MY 1985 projection is 4.8 mpg lower than 29.9 mpg is that the average GM model weighs about (deleted) more than projected in 1977 . . . The redesign, however, did not achieve the full amount of weight reduction originally projected and in most cases, the material substitution actions did not occur."

Q. This NHTSA reports seems to say that GM's problem is not that Americans are demanding too many large cars, but rather that you did not carry through, or you delayed, your plans for technological innovation. Would you comment on this?

A. The 1977 scenario referenced was provided by GM on April 12, 1977 in response to NHTSA's question regarding what would be required to meet a 27.5 mpg standard by 1985. It was not in any way a formal product plan for the Corporation. Rather, it was a considered but speculative response to a request from the NHTSA for a scenario that would show compliance with 27.5 mpg in 1985. We characterized the scenario as "hypothetical" in our response.

GM's scenario included 25% diesel engines and a projection that 2/3 of all GM engines would be 4 cylinder and 1/3 would be 6 cylinder (no V-8 engines by 1985). It also included a fleet average test weight of 3100 lb. In that same response, however, GM informed NHTSA that this was a very drastic scenario and there was no guarantee that the consumer would buy the products.

GM today offers product lines that would be expected to comply with the 27.5 mpg standard were gasoline prices at the levels projected at the time the fleet was designed. With much lower than anticipated gasoline prices, consumers have tended to purchase larger, heavier vehicles that better meet their needs. Necessarily, this buying behavior increases GM's average vehicle weight and decreases CAFE.

Most of the technology envisioned in 1977 for MY 1985 has been introduced, CAFE standards are not being achieved because of changes in consumer preference which have resulted in strong market demand for family-size cars. Even though we have continued to introduce new fuel efficient FWD vehicles with the intention of eliminating the RWD models they were to replace, market demand has extended their production life-cycle and provided numerous jobs which otherwise might not have existed. Market demand for these vehicles has remained strong partially because their fuel economy has been dramatically improved over their mid-1970's counterparts.

Q. Didn't you submit to the NHTSA a compliance report in December of 1984, just three months before you petitioned to roll back the CAFE standard, which indicates that GM will not only meet the 1985 standard, but it will exceed it to make up for the use of carry-back credits in 1984? Isn't there a contradiction here? What did you tell NHTSA in this compliance report?

A. GM interprets this question as referring to GM projections that it will exceed the 27.5 mpg standard in future model years to make up for earlier model year shortfalls. GM will not meet or exceed the standard in 1985 and so told the NHTSA in the December 1984 report. There is no contradiction. We told the NHTSA in the report, in our petition and supplemental filings and we testified before the Subcommittee that our long-range projections are subject to great uncertainty and that the likelihood that the contemplated carry-back credits from model years 1987-1989 will not be fully earned is increasing.

You say in your oral statement that if you restricted production of your cars to meet the CAFE requirements that certain foreign manufacturers who have specialized in subcompact and compact cars and who have a large bank of fuel economy credits would import more large cars to replace those you do not produce. According to the EPA Fuel Economy Guide, only GM and Ford produce "large cars."

Q. What other "large cars" are produced in the world which could be imported to the U.S.?

Q. Is the problem that foreign "midsize" cars would displace domestic "large" cars?

A. In order to clarify the record, it must be pointed out that GM did not state that foreign manufacturers would import more large cars to replace those which GM would not produce. What GM said was:

> "any restriction of production would benefit certain foreign manufacturers who have historically specialized in subcompact and compact cars and who have accumulated a large bank of fuel economy credits which would allow them to manufacture and import larger cars to meet the demand of that segment of the market" [emphasis added]. (Reference GM testimony of May 14, 1985 to the Senate Subcommittee on Energy Regulation and Conservation.)

The distinction here is that certain foreign manufacturers may decide to begin importing larger vehicles than they currently offer but these would not necessarily be "large" cars.

Currently, only a very limited offering of these larger cars are imported from Japan. These include the Toyota Cressida and Nissan Maxima which compare in size to GM's newly introduced "N" series vehicles like the Pontiac "Grand Am".

At the present time, however, a number of other intermediate sized Japanese vehicles are manufactured for consumption in Japan which could potentially compete with domestically produced U.S. offerings as indicated in the following table:

Similar to GM Product Offering	Japanese Product Offering
"G" Car Line (Oldsmobile Cutlass Supreme)	Toyota Century Nissan President
"A" Car Line (Chevrolet Celebrity)	Toyota Crown Nissan Cedric/Gloria
"N" Car Line (Pontiac Grand Am)	Nissan Laurel Nissan Skyline Mazada Cosmo/Luce Mitsubishi Debonair Nissan Leopard Toyota Soarer

It should be noted that although the Japanese vehicles listed in this table would be direct competitors to the GM products to which they are similar, the products would also compete against other GM product lines. For example, the most direct comparison with the rear wheel drive Toyota Century and Nissan President is with the GM "G" car line, in terms of vehicle size. However, in terms of size and possible price/value, the product offerings could be expected to compete with GM's newly redesigned front wheel drive "C" series vehicles, like the Oldsmobile 98 Regency. Therefore a curtailment in the production of either the GM "G" or "C" car series to meet CAFE may create the opportunity for potential importation and sales of the Toyota Century or Nissan President into the U.S. market.

In the hearing Senator Metzenbaum asked you about the NHTSA memo from Robert Shelton which attempts to explain why GM did not achieve their planned fuel economy target. You attributed the difference between what you achieved and what you hoped to achieve to consumer demand for larger cars. However, this NHTSA memo says on page 3, "In addition, GM's sales mix for MY 1985 has a higher proportion of smaller cars than assumed in the 1977 analysis."

Q. Would you comment?

A. The term "larger cars" implies larger engines as well, and in that regard, please see page 27.

It should be noted also that the scenario in question in the NHTSA's 1977 analysis was only a hypothetical one constructed to meet a 27.5 mpg standard using demand assumptions that proved ultimately incorrect especially with respect to engines .

In your oral remarks you said that GM fell short in its weight reductions because certain of the material substitutions which you had planned to make "simply turned out not to be cost effective, and we couldn't make them and sell the car at the price that the consumers would accept."

Q. What material substitutions had you assumed in your plans which you made prior to 1981 for meeting the 1985 CAFE standards which you determined not to be cost effective? What was the estimated cost of each such substitution per car and the associated weight reduction?

A. Material substitution implies the use of lightweight, high strength materials which are generally very costly. Therefore, we would not resort to their use unless there was a special need to do so. As pointed out in our testimony, it is generally agreed that our Japanese competitors already have a large cost advantage over domestic producers.

Rather than using premium materials to reduce weight to improve fuel economy, we have successfully accomplished our weight reduction goals through downsizing.

Among the lightweight materials we have considered using are aluminum, high strength low alloy steel and certain plastics. While those are now used for some automotive applications, lightweight generally is only one of the characteristics that is considered during the design phase. For example, with respect to aluminum body panels, repairability also is an important consideration.

Ford

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June 19, 1985

The Honorable Don Nickles
Chairman, Subcommittee on Energy
  Regulation and Conservation
United States Senate
Washington, D. C. 20510

Dear Senator Nickles:

Thank you for providing Ford Motor Company with the opportunity to testify at the May 14, 1985, Oversight Hearing on Automobile Fuel Economy Standards before the Subcommittee on Energy Regulation and Conservation. As requested in your May 31, 1985 letter, attached are answers to additional questions which time did not permit members of your Subcommittee to ask during the May 14 hearing. In order to avoid repetition in our answers, we have taken the liberty of combining related questions.

Sincerely,

H. O. Petrauskas

Attachment

Attachment

Questions from the Majority for Ford Motor Company

Q. #1 Ford has asserted that "application of the statutory requirement for a 'maximum feasible' level indicates that the 27.5 mpg standard should not be raised in this decade." Given Ford's admission of "the uncertainty of current forecasts," what analyses support placing "a cap" on the standard through 1990?

Q. #5 Would you provide this Subcommittee with the analyses conducted to determine that a 1.5 mpg reduction in the standard versus a 1.0 mpg or a 0.5 mpg reduction would be necessary to comply with the maximum feasibility principle?

A. #1 & #5 To amend the standards, NHTSA must determine the "maximum feasible" level attainable by the automobile industry. The four factors required to be considered in determining any new standard are:

- Technological feasibility
- Economic practicability
- The effect of other Federal motor vehicle standards on fuel economy
- The need of the nation to conserve energy

Ford has performed analyses to determine its "maximum feasible" CAFE projections through the 1989 model year ~~MY~~, taking into consideration all of the above factors. Between the 1985 and 1989 model years, Ford will invest an estimated $8 billion -- or over $1,000 retail price equivalent per average car -- to improve the fuel economy of its U.S. fleet. Notwithstanding the technology improvement plans we have in place to increase the fuel economy of all our existing and replacement models, there is a very substantial risk that this CAFE increase will be more than offset by continuing strong market demand for larger cars and engines and an even sharper increase in the number of small Japanese imports. For this reason, we conclude that 26.0 mpg represents a maximum feasible standard for the period 1986 through 1989.

For 1986 for example, Ford has projected CAFE levels between 25.9 and 26.4 mpg based on the following assumptions: sharp increases in the importation of small Japanese cars, a mix of small, medium and large cars based on free market demand, and implementation of all reasonably available technical and marketing strategies to increase CAFE.

Ford also assessed the economic impact of efforts to meet the 27.5 mpg standard in 1986 through production restrictions. Our analyses indicate, for example, that other things being equal, the effect of reducing production of family-size cars by 100,000 units would not be sufficient to raise our CAFE from 26.0 mpg to 27.5 mpg.

A determination of what constitutes a "maximum feasible" level of CAFE in the future, of necessity, requires a balancing of risks. It is true that forecasting in the present market and energy environment is difficult but this is our "best guess" at this time. There are, of course, additional technical and market risks that could further reduce CAFE or there may be energy and economic developments that could have the effect of increasing CAFE. Because of the industry's lead times, we have urged DOT to revise the standards for 1986-1989 based on today's data. A decision on one year will mean Ford will face new production decisions just months from when the rule is issued. If circumstances change to suggest that a different "maximum feasible" level is appropriate for the later years, NHTSA can revise the standard accordingly.

We believe a fair assessment of the facts indicates that the risk of severe economic dislocation is great if the standard is not changed from 27.5 mpg to 26.0 mpg. Conversely, the risk to the nation's energy conservation goals is modest. Even at a standard of 26.0 mpg for the 1986-1989 period, the fuel economy of the average car on the road will increase, because the new cars sold have significantly better fuel economy than the cars they replace. We estimate that at most a change in the standard from 27.5 mpg to 26.0 mpg is equivalent to an increase of only 0.06% in the U.S. consumption of petroleum.

Moreover, in the event the availability or cost of gasoline should change dramatically, Ford has available the products and the capacity to meet a major increase in the demand for subcompact cars. Our Escort has been the best selling subcompact in the U.S. for several years. Recently, Ford introduced major redesigns to the Escort to assure its continuing appeal to buyers.

Q. #2 In your March 1, 1985 letter to NHTSA, you stated that "manufacturers have the facilities, products and supply base to respond to dramatic increases in demand for small cars." What assurances can you provide to this Subcommittee that this will continue to be the case, if the CAFE standard is reduced?

A. #2 One thing that should be made clear is that even with a CAFE standard of 26.0 mpg, Ford will have to sell in proportion as many of its small cars as at present to achieve compliance. Ford will continue to place heavy marketing emphasis on its fuel efficient vehicles such as Ford Division's Escort and Tempo and Lincoln-Mercury Division's Lynx and Topaz in an effort to move toward the market mix necessary to support compliance. Ford is not requesting a reduced standard to adjust its market mix toward large cars but rather to be able to satisfy current market demand for full size cars and still achieve compliance.

Ford has made very substantial investments ($8 billion since 1979) in improving the fuel economy of its products and the Model Average Fuel Economy (MAFE) has almost doubled from 14.4 to 28.4 mpg during the 1975 through 1985 model years. These dramatic improvements in fuel economy were stimulated by a combination of market demand, competitive pressures and government legislation. Even with a lowering of the CAFE standard, consumer demand for fuel efficient vehicles and the highly competitive nature of the market place will necessitate a continued high level of investments ($8 billion 1985-1989) by Ford in developing and manufacturing vehicles designed to continuously improve the fuel economy of individual models. Having made these multi-billion dollar investments in new high technology fuel efficient products, such as Escort/Lynx and Tempo/Topaz, Ford will continue to aggressively market these products to optimize current production capacity and maximize the return on its investments.

Q. #3 In petitioning in March for a reduction of the CAFE standard for passenger cars in model year 1986, both Ford and GM were aware that each phase of the rulemaking, if the petitions were granted, would have to be shortened. Why were the petitions not filed earlier?

A. #3 Following the announcement in late February of significant increases in the importation of Japanese vehicles, it became no longer reasonable to project that small car sales could be increased sufficiently to assure compliance. Even with the addition of almost 40 new marketing and technical actions solely to enhance CAFE, a shortfall was projected. Therefore, Ford was left with no option than to request a change in the standards.

Ford's first priority has been, and will continue to be, to make every possible effort to comply with the standards. By making available a full range of products incorporating the latest technology, including 10 of the top 14 domestic manufactured fuel efficient rated vehicles, Ford took the product actions necessary to achieve compliance given the current mix assumptions. In addition, Ford took aggressive marketing and pricing actions to increase sales of its most fuel efficient cars. However, continuing strong sales of family and mid-size cars and larger engines resulted in continuously decreasing CAFE projections.

Q. #4 The Department of Commerce, in commenting to NHTSA on the Ford and GM petitions for a reduction in the standard, stated that "the shift in consumer demand toward less fuel-efficient cars and other unforeseen developments since 1981 have eliminated the ability of full-line U.S. car manufacturers to apply the complete range of fuel-saving technology they have developed." Would you tell the members of this Subcommittee what, if any, available fuel saving technologies have been curtailed or delayed in implementation?

A. #4 Ford Motor Company met or exceeded most of the NHTSA technology goals on the bases of which the CAFE standards were established. Since 1977, Ford has reduced the sales-weighted average vehicle inertia weight by 27%, rolling resistance by 40% and aerodynamic drag by 24%, which meet or exceed the NHTSA projections of 28%, 35% and 20% respectively. The principal example of developed technology which we have been unable to fully apply to our products is the diesel engine. In 1980, it was projected that industry-wide demand for diesel engines would be approximately 20%. Since 1980, the price of diesel fuel increased so that diesel oil became more expensive than gasoline. As a result in 1985, the demand for diesel engines in Ford cars has been less than 1%, even though in 1984 Ford was second only to Mercedes in sale of diesel powered passenger cars in the U.S.

We would note that since the time the CAFE standards were established in 1975, Ford has continued its efforts to develop many new technologies. Thus, for example, research work on a wholly new open chamber stratified charge engine (so called PROCO engine) was redirected when difficulties were encountered in maintaining extremely tight manufacturing tolerances and the very aggressive fuel economy advantages (estimated by NHTSA at 20%) failed to materialize. Rather than continue development work on a revolutionary new engine concept which may not have been successfully reduced to practice for many years, Ford proceeded immediately to begin to modify its existing engines to take advantage of the knowledge and techniques -- low friction and, fast burn -- developed as a result of PROCO research.

Q. #6 The Department of Commerce has suggested that, pending the introduction of new, more fuel-efficient large car models in later years, Ford and GM might consider relocating production of some existing large car volume to foreign locations, a strategy what would shift some large cars to the import fleet of domestic manufacturers where CAFE levels are expected to be quite high. Are Ford and GM considering such a move?

Q. #7 Under what conditions would such a move occur and what would be the impact on employment at U.S. plants?

A. #6 & #7 Studies of the feasibility of production outside the U.S. of some full-size cars are among the many CAFE related studies which are under way. These studies are among many which have as their objective identifying a means of CAFE compliance other than production restrictions in the event applicable CAFE standards cannot be met. These studies are incomplete and thus no decisions have been made. Given the objectives of these studies, i.e., to minimize production restrictions and curtailment, it is reasonable to assume that the effect on U.S. employment of any of the strategies being studied is less severe than that associated with product restrictions.

Questions from the Minority for Ford Motor Company

Q. #1 You have done considerable work on methanol-powered vehicles. How close are we to having such cars on the market in large numbers?

A. Ford has had considerable experience with neat methanol fuel vehicles; more than 600 such vehicles are presently in use by fleets, primarily in California. The overall experience gained from these field trials is providing a foundation and direction for future vehicle design, fuel and oil specifications, and fuel distribution systems. Because the establishment of a nationwide methanol supply and distribution system is not under active consideration, we do not believe it is at all likely such vehicles will be in widespread use in the foreseeable future.

A very new research concept being evaluated by Ford is a design of a flexible fuel vehicle which ideally could be capable of operating on any combination of gasoline or methanol, thus not being dependent on a neat methanol distribution system. Such vehicles are in the very early research stage and many technical issues will have to be resolved before production plans could be considered. At the very minimum, four years would be required to place a flexible fuel vehicle in production. Such a decision would be predicated on no major technical problems being encountered and the existence of some incentives to encourage customers to buy these vehicles.

Q. #2 Where specifically are your large cars produced?

A. #2 Ford's larger cars are assembled at the following locations:

Product Line	Plant
LTD/Marquis Taurus/Sable	Chicago, Illinois Atlanta, Georgia
Crown Victoria Grand Marquis	St. Thomas, Ontario
Mark VII, Continental Town Car	Wixom, Michigan

Major components for Ford's large cars are manufactured at the following locations:

Component	Plant
Automatic Overdrive Transmissions	Livonia, Michigan
5.0 Litre engines	Cleveland, Ohio Windsor, Ontario

Q. #3 In your oral statement you explain that Ford offers 8.8% financing on the Mark and Continental car lines to induce purchasers to buy those products or car lines instead of the very popular Lincoln Town Car which is a larger luxury car. According to the 1985 EPA Mileage Guide, the Lincoln Continental and Mark VII, when equipped with gasoline engines, have exactly the same fuel economy rating as the Lincoln Town Car.

a) So luring customers to the Mark and Continental models will not improve your CAFE, will it? You have included gasoline-powered Mark VII and Continentals in the 8.8% financing, have you not?

Q. #4 In your oral statement you said, "Our intent with our 8.8 percent financing program is not to sell more luxury cars in total. What we would like to do is to convince consumers who would otherwise buy our largest luxury car to try a smaller luxury car."

If there is no CAFE improvement to be gained from this 8.8% financing, why are you doing it?

A. #3 & #4 The regulations which apply to fuel economy labels require that all vehicles with the same engine and inertia weight shall be represented by a common fuel economy label. Therefore, the Lincoln Town Car, Continental and Mark VII are assigned the identical fuel economy value, notwithstanding the fact that at the time the label value was approved by EPA, the individual Continental test result, for example, was 0.6 mpg higher than the sales weighted average of all the data.

For CAFE purposes, more test data are necessary than for fuel economy labels because CAFE is required to be calculated to the nearest one-tenth mpg while fuel economy labels are shown as whole mpg. Our estimates indicate that by year end the Continental and Mark VII will be calculated to have more than one-half mile per gallon better fuel economy than the Town Car. Because CAFE is a sales weighted value, increased Continental and Mark VII sales, therefore, are expected to provide a CAFE benefit.

Finally, it should be noted that financing incentives typically do not draw buyers into the luxury car market from other segments because of the significant price differential. Thus, a program of this sort appeals primarily to potential luxury car buyers. The net effect of the 8.8% financing program would be to make our mid-size Continental and Mark VII luxury cars proportionally more attractive than the traditional Town Car. Persuading large, luxury car buyers to try a smaller, mid-size version is certainly "directionally" correct from the standpoint of energy conservation.

Q. #5 Are you familiar with the 1977 RSP Fuel Economy Projections that NHTSA provided to your company on April 12, 1985, under a cover memorandum from Robert Shelton, Program Manager, to the Docket Section, which compares Ford's current fuel economy projections for model year 1985 when the agency established passenger automobile fuel economy standards in 1977? That report says, "As in the case of GM, the main reason why Ford's present MY 1985 CAFE projection is 2.6 mpg below NHTSA's 1977 projection is that the company's vehicles are heavier than projected. The MY 1985 Ford passenger car fleet has an average test weight (deleted) heavier than projected in 1977, after adjusting for comparable sales mixes...Again, as with GM, Ford generally did not accomplish the second round of weight reduction, that was anticipated to typically remove 150-300 pounds from each car line."

A. #5 Ford Motor Company responded to the April 12, 1985 memorandum with a detailed analysis demonstrating that if NHTSA had carried out its analysis at a more detailed level (e.g., look at the mix of cars within each general class), the same methodology would have yielded quite different results. Using the methodology established by NHTSA in the 1977 RSP, Ford has reduced its 1985 average inertia weight by 1,137 pounds, just 63 pounds short of the NHTSA projected weight reduction. Ford had, in fact, exceeded the NHTSA weight reduction projections by 1982, however, the market shift toward larger, heavier cars has increased the average weight of Ford vehicles from 1982 to 1985 even though the weight of individual models has generally been reduced during this period. Applying the 1982 sales mix to Ford's 1985 product line would result in a 1985 fleet average test weight that exceeds NHTSA projection by 29 pounds.

CHRYSLER'S RESPONSE TO QUESTIONS OF
SENATE SUBCOMMITTEE ON
ENERGY REGULATION AND CONSERVATION

Q-1. **HAS CHRYSLER EVER SOUGHT RELIEF FROM THE CAFE STANDARDS? IF SO, WHAT WAS THE RESULT OF THAT PETITION?**

A-1. In 1981 Chrysler sought and was granted relief from the light truck CAFE standard. At that time Chrysler was on the brink of insolvency and the entire auto industry was experiencing its worst recession in 60 years. In this case, economic practicability was a legitimate argument. Chrysler had no ability to bring new products to market.

However, under present conditions, economic impracticability is not a valid defense for noncompliance. Both GM and Ford have had ample time and resources to develop and produce fuel-efficient vehicles. Instead, they made decisions to defer products already scheduled for production in order to maximize profits at the expense of fuel economy.

Q-2. **CHRYSLER POINTS TO $4 BILLION IT HAS INVESTED IN IMPROVING ITS FUEL ECONOMY TO MEET THE CAFE STANDARDS. WERE THESE EXPENDITURES INFLUENCED BY FACTORS OTHER THAN CAFE? FOR EXAMPLE, IS IT NOT TRUE THAT THE CHRYSLER LOAN GUARANTEE ACT REQUIRED CHRYSLER TO ADOPT ENERGY-SAVING PRODUCT PLANS AS A CONDITION OF RECEIVING LOAN GUARANTEES? WHAT EFFECT DID THE REQUIREMENTS OF THE LOAN GUARANTEE ACT HAVE ON CHRYSLER'S PRODUCT PLANS?**

A-2. Under the Loan Guarantee Act, Chrysler had to file plans showing compliance with CAFE standards. But Chrysler paid off its federally-guaranteed loans in the Summer of 1983. We could have stopped our CAFE progress then, but we didn't. We met or exceeded the 1984 and 1985 standards, and we'll continue to improve through the rest of this decade.

In contrast, for 1984 and 1985, Ford and GM chose to keep profitable old-technology cars and delay new fuel-efficient replacements. Thus, at a time when all the Big Three manufacturers were free to make product decisions, only Chrysler chose to obey the standard. Ford and GM decided to disregard it.

Q-3. **CHRYSLER HAS MADE IT VERY CLEAR THAT IT WOULD CONSIDER A REDUCTION IN THE STANDARD AS COMPETITIVELY PENALIZING CHRYSLER FOR COMPLIANCE WITH THE LAW. WHILE CURRENT STATUTES CONTAIN THE FLEXIBILITY TO RELAX THE STANDARDS BASED ON A JUDGMENT OF CERTAIN CRITERIA, THE STATUTES DO NOT PROVIDE FOR ANY COMPENSATION IN A CASE SUCH AS CHRYSLER INDICATES WOULD RESULT WITH A REDUCTION IN THE CURRENT STANDARD. WOULD YOU RECOMMEND THAT SUCH FLEXIBILITY SHOULD BE ENACTED INTO THE STATUTES?**

A-3. We believe that NHTSA has the authority under the current law to relax the standard in a manner that does not penalize a company that complies with the law. NHTSA is obligated to provide the industry with sufficient lead time before altering the CAFE standards so as to avoid putting any company that has taken the necessary steps to comply at a disadvantage. In addition, the statute itself already provides for penalties which, in effect, would deprive a company of the competitive advantages that it realizes when it fails to comply. Thus, we believe that the current law provides a sufficient mechanism to ensure fair treatment among manufacturers when a modification of an existing standard is justified under the statutory criteria.

With regard to the pending petitions of GM and Ford, we believe that they are both untimely and fail to satisfy the statutory criteria for changing the CAFE standard.

Q-4. **THOSE WHO SUPPORT A REDUCTION IN THE EXISTING CAFE STANDARD ARGUE THAT, EVEN IF INDIVIDUAL MANUFACTURERS ARE ALLOWED TO MEET A LOWER STANDARD, ENOUGH PRODUCERS WOULD BE ABOVE THE STANDARD TO BRING THE OVERALL NEW CAR FLEET INTO COMPLIANCE AND ACTUAL ON-THE-ROAD ECONOMY WOULD CONTINUE TO IMPROVE. IN SUCH A LOWER-STANDARD SITUATION, CHRYSLER WOULD BE AN ABOVE-THE-STANDARD PRODUCER. IN THOSE CIRCUMSTANCES, WOULD CHRYSLER MAINTAIN, OR INCREASE, A 27.5 MPG LEVEL OR WOULD CHRYSLER, PERHAPS, SACRIFICE SOME FUEL EFFICIENCY TO COMPETE IN OTHER AREAS?**

A-4. If Ford and GM are allowed to manipulate the market and stimulate demand for large cars, we will have to follow their lead to an extent in order to remain competitive. However, at present, our plans are to introduce a large, front-wheel-drive, transverse engine high-tech model as an additional entry in our large car segment of the market. This new car will have much improved fuel economy. Our fleet, including the more economical large car, will exceed the 27.5 mpg standard while offering a full line of cars.

We believe a look at the 1985 Chrysler fleet will confirm our commitment to fuel economy. Our minivans, the Plymouth Voyager and the Dodge Caravan, are an excellent example of this commitment. We produce these vehicles to satisfy the needs of large families and to transport goods in a highly fuel-efficient manner. We chose to do this instead of retaining old, heavy, inefficient station wagons. Our minivans are a huge success. We have proven that modern technology and fuel economy can indeed be strong sales tools.

Q-5. **CHRYSLER IS MEETING THE CURRENT AUTOMOBILE FUEL ECONOMY STANDARD AND STRONGLY OPPOSES ANY REDUCTION OF THAT STANDARD. WOULD CHRYSLER SUPPORT AN INCREASE IN THE 27.5 MPG STANDARD, AND, IF SO, TO WHAT LEVEL WOULD IT BE REASONABLE TO RAISE THE STANDARD?**

A-5. We are not in a position now to project what the CAFE standards should be for the future. Our greatest concern with regard to an increase in the current standard is that we be given sufficient lead time to make our plans. Chrysler has already shown that it is willing and capable of making the necessary commitments to achieve compliance with government-mandated CAFE levels, as long as there is sufficient lead time to do so. We are currently planning our 1990 models and we therefore need to have at least five years' advance notice of an increase in the standard.

Equally important, any proposed increase in CAFE must be carefully calculated to ensure that it is technologically achievable within the designated time frame. We would only support an increase in CAFE that was based on a realistic assessment of the feasibility of achieving the new standard.

Q-6. **FORD HAS STATED THAT THE MILEAGE STANDARD NEEDS TO BE EVALUATED IN TERMS OF TODAY'S ECONOMIC AND MARKET CONDITIONS, NOT IN TERMS OF TEN-YEAR-OLD PREDICTIONS. DO YOU DISAGREE WITH THAT STATEMENT, AND, IF SO, WHY DO YOU DISAGREE?**

A-6. Chrysler agrees with NHTSA's statutory authority to alter the CAFE standard in light of current market conditions provided certain statutory requirements are met. However, in the case of GM's and Ford's petitions, the statutory requirements are not met, and the market conditions do not merit a revision. It is worth noting in this regard that in the course of evaluating the CAFE standard in terms of today's economic and market conditions, the NHTSA staff published a report in April revising their 1977 fuel economy predictions for 1985 and concluded that GM and Ford had failed to meet the 1985 standard because of technological shortcomings, not market forces.

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June 25, 1985

Senator Don Nickles
Chairman
Subcommittee on Energy
    Regulation and Conservation
Committee on Energy and
    Natural Resources
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

Enclosed herewith are Professor Leone's responses to the questions you sent him under letter dated May 31, 1985, for inclusion in the record of your hearing of May 14, 1985.

With best regards, we are,

Sincerely,

BUSBY, REHM and LEONARD, P.C.

David Busby

Enclosure

BUSBY, REHM AND LEONARD, P.C.

QUESTIONS FOR: PROFESSOR ROBERT A. LEONE

Q: The Ford and GM petitions for a lowering of the standard for Model Year 1986 were not filed until March 1985. In order to reach a decision before the beginning of the Model Year, NHTSA has had to shorten all phases of the rulemaking procedure. Should NHTSA decide in favor of a roll-back, the transition from the 27.5 mpg standard to one of 26.0 mpg would be abrupt. Have you done any analyses comparing the impact on the industry as a whole of a Model Year 1986 versus a Model Year 1987 roll-back?

A: Given the long lead times in automotive planning, an abrupt change in policy has the perhaps ironic characteristic that it will have virtually no impact on technology decisions -- they will be the same as if the standard had not been changed. The substantive effect will be on the prices of vehicles offered for sale.

This is, of course, merely the flip side of maintaining a 27.5 mpg standard in Model Year 1986. Because technology decisions have already been made, the only way to meet this stringent standard is through price-induced mix changes -- changes which frustrate consumers, divert sales from cars to trucks and vans and from producer to producer.

Q: You have described the need for a policy to protect the nation's interests in the 1990s, yet you advocate a less stringent CAFE standard. Is this not a contradiction?

A: In my testimony I advocated a standard of 26.0 mpg versus 27.5 mpg. While this standard may be less stringent on paper, it is not necessarily less stringent in practice. As I noted, an excessively stringent standard triggers counterproductive and unfair responses which undermine the goals of the fuel economy policy in the first place. Because a standard of 26.0 is less distorting than a standard of 27.5 mpg, the actual impact may well be more fuel-conserving than a seemingly more stringent standard.

An extreme example illustrates the point: The nation doesn't benefit at all from vehicles which get 50 mpg if no one buys them. Similarly, if a standard of 27.5 mpg discourages sales of new cars and diverts sales to light trucks and vans, which have lower CAFE levels, then there is no benefit to a seemingly tighter rule.

For the 1990s, the nation needs real improvements in the fuel economy of the on-the-road fleet, not regulatory stringency which appears only on paper.

Q: Gasoline prices are significantly lower today than those that were projected when CAFE standards were enacted. With the lower prices, we are seeing increased demand for high-performance automobiles. Given these circumstances, what incentives, other than CAFE standards, encourage manufacturers to invest in fuel economy?

A: As gasoline prices fall, consumers do purchase larger and more luxurious cars. It would be incorrect to conclude from this experience, however, that automakers have no incentive to invest in fuel-efficiency. In fact, the appropriate conclusion is just the opposite.

The fact that consumers shift their demands so rapidly in response to decreases in gasoline prices is merely another way of saying that they change their demands rapidly when prices rise. With gasoline prices expected to rise over time as energy reserves are depleted, no automaker can expect to be profitable without having the technology and production capacity available to meet this anticipated demand.

CAFE standards are by no means the sole or even the most important incentive automakers have to improve fuel economy. The consumer is so sensitive to the price of gasoline -- as is evidenced both when prices fall and when they rise -- that automakers must invest in fuel economy or risk losing their market entirely.

RESPONSES OF CLARENCE M. DITLOW III, DIRECTOR, CENTER FOR AUTO SAFETY, TO WRITTEN QUESTIONS SUBMITTED FOLLOWING THE MAY 14, 1985 HEARING OF THE SUBCOMMITTEE ON ENERGY REGULATION AND CONSERVATION, COMMITTEE ON ENERGY AND NATURAL RESOURCES, UNITED STATES SENATE

Question 1

You have stated that the automobile fuel economy standards represent the most significant energy conservation program in this country. The Center for Auto Safety has petitioned for increasing CAFE standards beginning in Model Year 1987, citing the necessity of consistent progress toward higher goals. How would you respond to Dr. Whitman's (GMC) suggestion that Congress should enact greater flexibility into CAFE statutes?

Answer

EPCA currently contains more than ample flexibility for auto manufacturers to attain CAFE standards. The three year carryforward/carryback credit provision effectively averages compliance over a seven year period of time so that any unexpected production problems or sales shifts can be moderated. The Act also provides for the reduction or elimination of penalties if they would lessen competition. The Act provides for adjusting the standards to take into account emission and safety standard changes. Finally, the act sets an economic penalty so low ($5/tenth MPG) that the manufacturer can choose whether to make more fuel efficient vehicles or pay a small per vehicle fine and sell a less fuel efficient vehicle.

Question 2

There seems to be agreement that sales figures support a shift in consumer demand away from fuel efficiency and toward performance. You have suggested that advertising and availability play a significant role in this shift. What studies have you conducted that would support this view?

Answer

Contrary to Ford and GM's allegations, consumer demand for more fuel efficient small cars is greater than projected. DOT's analysis of its projections for the 1985 model year versus what actually happened states:

> Current sales mixes differ substantially from those assumed in the 1977 analysis. Despite the decline real fuel prices over the last few years, the current sales mix for each of domestic company has more small cars and fewer large cars than was assumed for the 1985 model year in the 1977 analysis. (April 15, 1985, Docket Analysis)

For example, General Motor's small car sales mix for 1985 is up from the projected 19.5 percent to 30 percent. Within the various car size classes, there has been some shift to less efficient V-8 engines, transmissions and options. It is in these areas that marketing plays a major role.

The role of marketing and availability is discussed on pages 6 and 7 of the Center's July 26, 1984 petition to NHTSA for higher CAFE standards (hereafter referred to as "Center petition"). A copy of the petition is attached. Recent documentation supplied by Ford to NHTSA shows that manufacturer marketing programs encouraging the purchase of small engines accounted for only 13% and 10% of total marketing costs for 1984 and 1985, respectively. Also, in the period between January 1, 1984 and July 1, 1985, the majority of Ford's marketing and incentive expenditures were for "mid-size" and "large/luxury" vehicles rather than "compact/sub-compact" vehicles. (See enclosed letter from Ford to NHTSA,dated May 29, 1985.)

Question 3

In petitioning the National Highway Traffic Safety Administration for an increased CAFE standard for passanger cars, the Center for Auto Safety asserted that the Agency has failed "to collect the information it needs to pursue its statutory mandate in a wise and well-informed manner." What information do you believe that the Department of Transportation should have collected that it has not collected?

Answer

NHTSA's ability to collect and analyize fuel economy information has been drastically reduced. On August 12, 1982 NHTSA announced it would no longer require manufacturers:

> to submit data on technology and sales changes from the preceding model year or changes during the current model year intended to increase fuel economy. No data will be required on marketing measures to be used to increase fuel economy. Also, manufacturers will be required to submit a variety of technical and sales data for each vehicle configuration only once rather than twice a year. (Seventh Annual Report to Congress, Fuel Economy Program, U.S. Department of Transportation January 1983.)

Such information is vital to the agency's analysis of manufacturers' progress in complying with the standards.

As former NHTSA Administrator Joan Claybrook points out in her testimony, NHTSA is not even fully capable of analyzing the limited information it currently receives. Since 1981, the fuel economy staff has been reduced from 27 full time professionals three. Further, as Claybrook points out, "the only fuel economy activity in NHTSA is carried out in the rulemaking office, which contains six professional staff, none of whom are recognized leaders in this field."

Question 4

According to the Energy Information Administration's *Monthly Energy Review* (Dec. 1984), the increase in gasoline consumption that would result from a 1.5 mpg reduction in the standard would amount to about 8,500 additional barrels per day, equivalent to 0.13 percent of total U.S. motor gasoline consumption and to 0.05 percent of total U.S. petroleum consumption based on 1984 annual consumption rates. Has the Center conducted analyses that would show the consumption picture that could be expected to result from an increase in the standard?

Answer

Using the conservative assumption that domestic production will remain constant at 10 million vehicles through 1990, the Center projects that the CAFE increases proposed by the Center above 27.5 mpg will result in fuel savings of at least 33.3 billion gallons of gasoline over a vehicle lifetime of 100,000 miles. On an annual basis, this is a 30,150 barrels per day decrease in gasoline consumption for the 1987 model year alone with a cumulative savings of 220,000 barrels per day by 1990.

Projected Energy Savings From Higher CAFE Standards

Model Year	CAFE (MPG)	Lifetime Fleet Savings (gallons of gasoline)	Annual Savings (barrels/day)
1987	31.5	4,620,000,000	30,150
1988	34.5	7,380,000,000	44,141
1989	37.5	9,700,000,000	63,275
1990	40.5	11,670,000,000	76,125
	Total	33,337,000,000	217,700

Question 5

Is it your view that administrative discretion or some other form of flexibility should be built into such an increase to allow for unforeseen events?

Answer

The attached Center petition to increase CAFE standards to 40.5 mpg documents the feasibility of these levels.

Question 6

The Center asserts that higher levels of fuel economy can be met "without substantial economic displacement in the auto industry." How do you define "substantial economic displacement," and what analyses has the Center conducted that support this conclusion?

Answer

The Center believes that EPCA, as currently enacted, contains ample flexibility for temporary CAFE shortfalls as is explained in our answer to Question 1.

As noted in the Center petition, a gradual increase in the fuel economy standards need not impose sudden and discontinuous changes in the industry. "Substantial economic displacement" involving a significant reduction in the overall number of auto workers need not occur if manufacturers simply introduced new fuel-saving technology as part of the regular redesigning and retooling of their models. Now is the time to accomplish these innovations when the domestic auto manufacturers are enjoying record profits. Further, fuel economy improvements force manufacturers to become less dependent on production of fuel inefficient vehicles. Manufacturers who make the investments needed to meet higher fuel economy standards now, will be in a much better position to avoid economic displacement resulting from future oil disruptions.

Question 8

The Center for Auto Safety has brought suit against the National Highway Traffic Safety Administration (CFAS v. NHTSA, D.C. Cir. No. 85-1231) over the timing of NHTSA's action in reducing the Model Year 1985 standard for light trucks. Does CFAS have a similar concern about the timing of the current Ford and GM requests to reduce the passanger car standard for Model Year 1986?

Answer

The Center is just as concerned about the eleventh hour request to lower the 1986 car CAFE standards as it is about the belated reduction of the 1985 light truck standard. Acting on Ford and GM's requests to lower the 1986 model standards with just a few remaining before the beginning of the model year would significantly undermine the fuel economy goals of EPCA. The Act requires NHTSA to set the "maximum feasible" fuel economy standard at least 18 months before the start of a model year, which is intended to give manufacturers ample notice of what standard they must meet, so they can adjust their production plans accordingly. Reducing the standard with at most a few days before the model year begins is just a scheme to avoid imposing economic penalties on GM and Ford who have choosen not to comply.

ENVIRONMENTAL POLICY INSTITUTE

EPI Response to Chairman Don Nickles on Fuel Economy Standards

1. EPI has stated (4/23/85 letter to NHTSA) that it is only logical that we strengthen our conservation efforts in the transportation sector during the current non-crisis period, and fortify a national energy policy while we are not in a reactionary position such as that which prevailed during 1973 and 1979. EPI recommends an increase in the automobile fuel economy standards. Given that this is a "non-crisis" period and that there does appear to be consumer pressure for larger, higher performance cars, would you, perhaps recommend a more gradual movement toward higher CAFE standards than that targeted over the past decade (i.e. 30.0 mpg in MY 1990)?

EPI Response

The Environmental Policy Institute (EPI) would recommend the achievement of a 45 miles per gallon Corporate Average Fuel Economy (CAFE) by 1995. This is an annual incremental fuel economy increase for the domestic fleet of less than 2 miles per gallon over the next ten years, and is consistent with the level of incremental increases accomplished by the industry between 1975 and 1985. Accordingly, legislation to mandate the 1995 achievement should be enacted this year so that the industry may have the necessary lead time to develop and integrate new products.

The current "non-crisis" period offers the best atmosphere for the formulation of a comprehensive energy policy to move the nation toward energy independence from imported oil. The enactment of increased post-1985 CAFE standards as a part of this policy is warranted.

The competitiveness of our domestic automobile industry in the small car market should still be a priority. As the U.S. Department of Commerce has noted, the US auto manufacturers' cost gap with Japanese producers presents "the most difficult and critical challenge" facing our industry today." The Commerce Department has predicted that present and future competition with Japan will be formidable in both the small and mid-size car markets.

The continued regulation of fuel economy improvements by the automobile industry should be accompanied by additional initiatives which foster a continued market for fuel efficient vehicles. For example, the enactment of a graduated gasoline tax in order to insure that gasoline prices are maintained at levels sufficient to dictate consumer demand, must be seriously considered.

With transportation being the single largest user of oil in the United States, extensive conservation efforts directed toward this sector can render the most significant results. It is projected that, over two million barrels of oil per day would be saved if automobile and light duty truck standards were increased to 45 mpg and 35 mpg respectively, relative to a 27.5 and 21 mpg baseline (1985 standards prior the light truck rollback). We should continue in this direction, and not steer from it in response to short-run energy situations.

2. The Environmental Policy Institute stated in an April 23, 1985 letter to NHTSA that "a continued investment in improving the fuel efficiency of mid-size and large vehicles could have aided both Ford and GM in the accomodation of consumer preference for these cars, and not adversely affecred the meeting of CAFE standards." What analyses has EPI conducted in this regard and what specific examples of such investments that might be made can you offer this Subcommittee?

EPI Response

EPI has conducted up-to-date-analysis over the last seven months on the ability of the automobile manufacturers to meet the CAFE standards. This analysis, entitled, "The Economic and Policy Implications of Improving Domestic Automobile Fuel Economy, by M. Arnita Hanon, focuses, among other things, on the financial capability of the industry to sustain the capital investments essential to increased automobile fuel economy over the next decade. The research reviews the incorporation of current state-of-the-art technology into new car fleet production, and related costs. The document also reviews the strengthened financial state of the domestic auto industry, and the need for its continued competitiveness in the small car market. The EPI research concludes that the achievement of a 45 mpg domestic fleet average by 1995 is not impeded by technological or economic obstacles.

In November, 1981, EPI published a paper entitled, "Improved Automobile Fuel Economy: Key to Reduced Petroleum Dependence," by Harriet Parcells. This paper also analyzed the potential for downsizing vehicles, and employing additional innovations to improve domestic fleet fuel efficiency by 1995. EPI has also published an analysis of automobile fuel efficiency improvements in a book entitled, Energy: The Conservation Revolution by William U. Chandler.

The year 1983 was the first year since the enactment of the Energy Policy and Conservation Act (EPCA) that GM and Ford missed the CAFE standards. Based on Oak Ridge National Laboratory Analysis, during that particular model year, configuration improvements (more efficient transmissions/engines) by GM, had a negative (-0.12 mpg) impact on improved fuel economy. For Ford, this factor did not detract from fuel economy increases; however its impact was a mere 0.24 mpg. In that same year, it is noted that the average vehicle inertia weights of the GM and Ford fleets increased relative to 1982 (GM: 1982: 3373 lbs./ 1983: 3463 lbs.; Ford: 1982: 3055 lbs./ 1983: 3273 lbs.).

For model year 1984, Oak Ridge also noted that, with Ford and GM, decreases in fuel economy in continuing configurations also contributed to a decline in sales weighted fuel economy. Sales shifts to less efficient models was also a factor in the failure of GM and Ford to meet CAFE standards for model years 1983 and 1984. At the same time, the introduction of nameplates with fuel economies lower than the previous model year's sales-weighted average had a negative impact on fuel economy improvements.

The presence of a number of 1983 new cars in 1983 and 1984 which had lower MPG levels than in the previous model years indicates that both GM and Ford did not target investments to the incorporation of more efficient engines and transmissions in the mid-size and large cars to the extent that they could have. For example, in 1982, Ford's Chevette had an MPG level of 38.2, and in 1983, this same vehicle had an MPG level of 33.2 (5.0 mpg less). As another example, NHTSA has noted the negative impact of increased engine size/weight ratio at Ford on the meeting of the 1985 CAFE.

It is also apparent that investments in increased weight reduction (shifting to front-wheel drive, materials substitution and downsizing) by Ford and GM could have aided in the meeting of CAFE. NHTSA has pointed out, in fact that, failure by these two companies to undertake an anticipated second round (1982-85) of vehicle weight reduction, which was expected to eliminate 150 - 300 pounds from each carline, is the primary reason that these companies will miss the 1985 CAFE standards.

Respectively submitted,
Norris McDonald
Norris McDonald
Director
Energy Conservation and
Transportation Project

APPENDIX II

Additional Material Submitted for the Record

Congressional Research Service
The Library of Congress

Washington, D.C. 20540

May 16, 1985

To: Senate Committee on Energy and Natural Resources
Attention: Jim Bruce

From: American Law Division

Subject: Liability of Directors of Automobile Manufacturing Concerns For Civil Penalties Incurred for Non-compliance with Federal Automobile Fuel Economy Standards

This will respond to your inquiry and our conversations regarding possible liability of directors of automobile manufacturing concerns for penalties incurred for non-compliance with federal fuel economy standards. Specifically, you have asked whether personal liability on the part of such directors might arise through a derivative suit brought by shareholders of the corporation.

Automobile Fuel Economy Standards

As you know, Congress has established federal fuel economy standards that require domestic manufacturers of certain classes of passenger automobiles to achieve for all covered vehicles specified average fuel economy standards.[1] The statutory specification of the average fuel economy standard in miles per gallon began in 1978 with increasing mileage requirements through 1980. Thereafter, the Secretary of Transportation was given discretion to determine, and did establish, certain standards with the involvement of Congress in a manner specified that is not of concern here.[2] The statute specifies the average fuel economy standard at 27.5 miles per gallon for 1985 and years thereafter.[3]

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[1] See, 15 U.S. Code Section 2001 *et seq*.

[2] See, 15 U.S.Code Section 2002.

The failure of any covered manufacturer to comply with the federal fuel economy standards constitutes unlawful conduct[4] that is subject to extensive civil penalties.[5] Among the possible civil penalties is a penalty calculated "...by multiplying $5 by...the number of tenths of a mile per gallon by which the average fuel economy of the passenger automobiles manufactured by such manufacturer during such model year is exceeded by the applicable average fuel economy standard established under section 2002(a) and (c) of this title, multiplied by the number of passenger automobiles manufactured by such manufacturer during such model year..." reduced by certain credits allowed under the statute.[6] In addition, certain civil penalties may be imposed of not more than $10,000 for each violation, with each day constituting a separate violation.[7]

It is with regard to these civil penalties for violations of the fuel economy standards that your question arises.

Derivative Suits

Among the rights developed at Common Law for the protection of a shareholder's ownership interest in a corporation is the right to bring a so-called "derivative suit" on behalf of a corporation alleging certain wrongdoing impairing the value of his shares in the corporation. Derivative suits are often brought against corporate insiders—directors or officers owing special duties of fiduciary responsibility to the corporation. The nature of derivative suits has been generally summarized as follows:

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[3] 15 U.S.Code Section 2002(a)(1).

[4] 15 U.S.Code Sectin 2007.

[5] 15 U.S.Code Section 2008.

[6] 15 U.S.Code Section 2008(b)(1)(A).

[7] See, 15 U.S.Code Section 2008(b)(2).

> Equity developed the derivative suit so that the shareholder "derivatively" or "secondarily" could enforce a corporate right against insiders or outsiders, where those in control of the corporation refused to have the corporation sue directly, and thereby protect the whole community of corporate interests—creditors and shareholders, including his own investment in the corporation. The plaintiff-shareholder in effect sues as guardian ad litem for the corporation, which although the real party plaintiff, is brought into the litigation as a nominal party defendant. The derivative suit, because of its procedural development is equitable in nature and besides often involves equitable issues of breach of fiduciary duty but can involve law issues of due care. While the derivative suit serves a useful purpose, it is susceptible to abuse by "strike suits" when brought by small shareholders and their attorneys to gain private settlement and self-enrichment. Misuses of the derivative remedy led to various restrictions being placed upon it by statutes, rules of practice, and increased judicial recognition of the plaintiff-shareholder as guardian ad litem for the corporation.8/

Thus, under what are now extensively defined state statutory procedures, shareholders may bring derivative suits on behalf of the corporation, for example, against directors of the corporation because of a breach of a legal duty owed to the corporation by the directors.

Your specific question is whether or not a suit in the form of a derivative action could be brought by a shareholder against the directors of a corporation for damages to the corporation arising from civil penalties for violation of the fuel economy standards. Underlying your question is the further question of what, if any, legal duties does a director of an automobile manufacturer owe to the corporation or its shareholders to avoid violation of the fuel economy standards and, perhaps more importantly, to avoid corporate liability for the payment of penalties for such violations.

8/ Henn, Harry G., Corporations (West Publishing Co. 1961).

These questions raise legal issues that appear to be novel and not readily answered on the basis of the direct application of controlling judicial precedent.

The Business Judgment Rule

As a general matter the courts are reluctant to interfere with the internal management of a corporation in a way that would substitute their judgments concerning management for the sound business judgment of corporate management. The so-called "business judgment rule" is a judicially developed doctrine that recognizes the legal need to defer to the business judgment of corporate directors and officers. It has been generally defined as follows:

> The "business judgment" rule sustains corporate transactions and immunizes management from liability where the transaction is within the powers of the corporation (intra vires) and the authority of management, and involves the exercise of due care and compliance with applicable fiduciary duties.[9]

As articulated by Mr. Justice Brandeis in United Copper Securities Co. v. Amalgamated Copper Co.,[10] with regard to a decision of directors not to bring an antitrust suit against a third party:

> Whether or not a corporation shall seek to enforce in the courts a cause of action for damages is, like other business questions, ordinarily a matter of internal management, and is left to the discretion of the directors, in the absence of instruction by vote of the stockholders. Courts interfere seldom to control such discretion intra vires the corporation, except where the directors are guilty of misconduct equivalent to a breach of

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[9] Henn, supra, at 364.

[10] 244 U.S. 261, at 263-264 (1917). Ashwander v. Tennessee Valley Authority, 297 U.S. 288 (1936), is often cited for the notion that it is enough for shareholders to show a breach of trust or duty in order to prevail in a derivative suit. But as Justice Brandeis observed there, at 343: "[I]f a stockholder could compel the officer to enforce every legal right, courts instead of chosen officers, would be the arbiters of the corporation's fate."

> trust, or where they stand in a dual relations which prevents an unprejudiced exercise of judgment...

In a somewhat broader definition of the business judgment rule, the Supreme Court of Delaware observed in Sinclair Oil Corporation v. Levien:[11]

> A board of directors enjoys a presumption of sound business judgment, and its decisions will not be disturbed if they can be attributed to any rational business purpose. A court under such circumstances will not substitute its own notion of what is or is not sound business judgment.

Nevertheless, the deference accorded to management under the business judgment rule is not total. In the recent decision, Aronson v. Lewis, of the Supreme Court of Delaware, these important observations were made:

> Moreover, a stockholder is not powerless to challenge director action which results in harm to the corporation. The machinery of corporate democracy and the derivative suit are potent tools to redress the conduct of a torpid or unfaithful management. The derivative action developed in equity to enable shareholders to sue in the corporation's name where those in control of the company refused to assert a claim belonging to it. The nature of the action is two-fold. First, it is the equivalent of a suit by the shareholders to compel the corporation to sue. Second, it is a suit by the corporation, asserted by the shareholders on its behalf, against those liable to it.
>
> By its very nature the derivative action impinges on the managerial freedom of directors.
>
> * * *
>
> [T]o invoke the [business judgment] rule's protection directors have a duty to inform themselves, prior to making a business decision, of all material information reasonably available to them. Having become so informed, they must then act with requisite care in the discharge of their duties. While the Delaware cases use a variety of terms to describe the applicable standard of care, our analysis satisfies us that under the business judgment rule director liability is predicated upon concepts of gross negligence.
>
> However, it should be noted that the business judgment rule operates only in the context of director action. Technically speaking, it has no role where directors have either abdicated their functions, or absent a conscious decision, failed to act. But it also follows that under applicable principles, a conscious decision to refrain from acting may nonetheless be a

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[11] 280 A.2d 717, 720 (1971).

> valid exercise of business judgment and enjoy the protections of the rule. (footnotes and references deleted)[12]

Thus, the traditional view is that the business judgment rule will protect corporate directors except where their actions involve gross negligence. However, the business judgment rule has recently undergone further judicial scrutiny that has generated debate over whether a trend has begun to retreat from the broad immunity the rule accords corporate management.[13]

In Smith v. Van Gorkom,[14] the Supreme Court of Delaware found the directors of a corporation liable for damages to the corporation because of their failure to make an informed business decision concerning the price at which the corporation would be sold in a merger arrangement with another company. In effect the directors voted to "sell" the corporation too cheaply without having before them adequate information regarding the intrinsic value of the company. The Court found, in applying the gross negligence standard of Aaron v. Lewis, supra, that such action did not constitute a proper exercise of the business judgment.

While the existing gross negligence standard was applied, the Court in Van Gorkom seemed to be requiring more significant investigation and information before the directors could avail themselves of the protections of the business judgment rule. In effect, the failure to seek information was deemed to be grossly negligent, and the business judgment rule provided no defense under the circumstances. Thus, there appears to be at least some minimal duty to act in an informed manner in order for directors to escape liability for "bad" business decisions.

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[12] 473 A.2d 805, 811-813 (Del. 1984).

[13] A recent article entitled "Boardroom Jitters--A Landmark Court Decision Upsets Corporate Directors," by Richard M. Leisner published in Barron's (April 22, 1985), at p.34, discusses in some detail reaction to, and possible legal implications of, the Delaware Supreme Court's decision in Smith v. Van Gorkom, infra.

[14] ___ Del. ___, 53 L.W. 2393 (Delaware Supreme Court, January 29, 1985).

Apart from these recent Delaware cases, the matter of derivative suit liability of corporate directors for corporate misconduct is a matter that has drawn extensive recent legal commentary.[15/] Many of the analysts are quick to note that various state jurisdictions have established different legal thresholds regarding duties owed to the corporations by directors. Not all jurisdictions seem to offer the breadth of director immunity as Delaware offers under the gross negligence standard. In many jurisdictions the duty of care

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[15/] See among other articles, Manning, The Business Judgment Rule in Overview, 45 Ohio State Law Journal 513 (1984); Morris, The Aftermath of Zapata Corp v. Maldonado [430 A.2d 779] : What is Left of the Business Judgment Rule? 88 Dickinson Law Review 441 (1984); Frankel and Barsky, The Power Struggle Between Shareholders and Directors: The Demand Requirement in Derivative Suits, 12 Hofstra Law Review 39 (1983); Fischel, The Corporate Governance Movement, 35 Vanderbilt Law Review 1259 (1982); Dickstein, Corporate Governance and the Shareholders' Derivative Action: Rules and Remedies for Implementing the Monitoring Model, 3 Cardozo Law Review 627 (1982); Weinfeld, Criminal Liability of Corporate Managers for Deaths of Their Employees: People v. Warner-Lambert Co.[414 N.E.2d 660 (N.Y. 1981)], 46 Albany Law Review 655 (1982); Duesenberg, The Business Judgment Rule and Shareholder Derivative Suits: A View From the Inside, 60 Washington University Law Quarterly 311 (1982); Brickey, Corporate Criminal Accountability: A Brief History and An Observation, 60 Washington University Law Quarterly 393 (1982); Haft, Business Decisions by the New Board: Behavioral Science and Corporate Law, 80 Michigan Law Review 1 (1981); Dent, The Revolution in Corporate Governance, the Monitoring Board, and the Director's Duty of Care, 61 Boston University Law Review 623 (1981); Coffee and Schwartz, The Survival of the Derivative Suit: An Evaluation and a Proposal for Legislative Reform, 81 Columbia Law Review 261 (1981); Moore, Corporate Officer and Director Liability: Is Corporate Behavior Beyond the Control of Our legal System? 16 Capital University Law Review; Jones, Corporate Governance: Who Controls the Large Corporation? 30 Hastings Law Journal 1261 (1979); Small, The Evolving Role of the Director in Corporate Governance, 30 Hastings Law Journal 1353 (1979); Coffee, Corporate Misconduct, 63 Virginia Law Review 1099 (1977).

owed by directors to assure compliance with the law is often characterized as being that of reasonable prudent men in making sound business decisions.[16] But it is difficult even under the prudence standard to find direct precedent holding corporate directors liable for losses in the form of civil penalties for non-compliance with law.

Although the concept of prudence as a business judgment standard has received extensive attention recently in the context of regulated utilities, where the standard would guide rate makers on the wisdom of public utility investments,[17] the prudence and reasonableness test is one the courts are reluctant to enforce against directors.

Thus, it would seem that as a matter of law the business judgment rule would provide a very substantial defense to a derivative suit brought by shareholders based upon recovery of civil penalties imposed on the corporation for non-compliance with federal regulation.

It is important to observe that where statutory laws have intended that directors bear legal responsibility and civil liability for their conduct in an official legal capacity as a director, statutes have directly provided that the penalties be brought against the directors. One major example that illustrates this point is federal securities laws, under which numerous direct penalties were both authorized and enforced against directors for their conduct.[18]

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[16] See for example the discussion of duties of care and prudence in Dent, The Revolution in Corporate Governance, The Monitoring Board, and The Director's Duty of Care, 61 Boston University Law Review 623, at 646 (1981), and the discussion regarding the obligation of director's to monitor compliance with the law by corporations, Id., at 676.

[17] See, The Prudent Investment Test in the 1980s, (The National Regulatory Research Institute, Ohio State University, April 1985).

One area of derivative actions brought against directors for corporate wrongdoing concerns corporate bribes and kickbacks given to foreign officials--conduct often illegal in foreign countries. However, almost uniformly, the several cases have found for one legal reason or another that directors to be absolved of liability. In Auerbach v. Bennett,[19] for example, the court found that director deference on the question of suits against involved directors to a special litigation committee established by uninvolved directors where the committee decided not to sue did not create liability on the part of the directors in a derivative suit.

And in Gall v. Exxon Corp.,[20] held that the decision of the directors not to sue on behalf of the corporation regarding the payment of illegal bribes was not a violation of law itself and that the directors were not liable in a derivative suit.

One of the leading cases often cited with regard to the liability of directors for actions of the corporation leading to possible civil damages on the part of the corporation is Graham v. Allis-Chalmers Manufacturing Co.,[21] in which the Delaware Supreme Court found that the directors of the corporation had not breached a duty of care to the corporation in failing to discover that antitrust violations leading to potential corporate liabilities were occurring on the part of several corporate officers.

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[18] See the discussion of liability of directors under securities laws in Haft, Business Decisions by the New Board: Behavioral Science and Corporate Law, 80 Michigan Law Review 1, at 27 (1981).

[19] 47 N.Y.2d 619, 393 N.E.2d 994, 419 N.Y.S.2d 920 (1970).

[20] 418 F. Supp. 508 (S.D.N.Y. 1976).

[21] 41 Del. Ch. 78 (Del. Sup. Ct.), 188 A.2d 125 (1963). See also, Ash v. International Business Machines, Inc., 353 F.2d 491 (3d Cir. 1965), cert. denied 414 U.S. 857 (1973).

Despite the extensive legal analysis of the liability of directors of corporations for corporate misconduct, clearly summarizing the law in the area is extremely difficult. In fact, one extensive analysis of this area of the law was summarized with this observation:

> As we have seen, the spectrum of possible judicial responses [to corporate misconduct] ranges from imposing strict liability to recognizing defenses that at least in combination, could immunize almost any form of misconduct from the reach of shareholders.22/

In considering the question of whether or not civil penalties or non-compliance with federal law constitutes sufficient negligence, whatever degree of negligence may be required, so as to create liability for the losses to the corporation on the part of the its directors, we are unable to identify direct judicial precedent. For this reason, it would appear that the general principles of the business judgment rule would govern the extent of any liability on the part of the directors.

There appears to be no authority that holds that the liability of a corporation for civil penalties, or even criminal penalties for that matter, constitutes negligence per se on the part of the corporate directors. Thus, the threshold issue for a court considering a derivative suit based on corporate non-compliance with federal fuel economy standards would be a question of law: what standard of negligence to apply to such a situation. The other issues for the court to consider in such a suit would be issues of fact, that might include some of the following issues, among others:

1) was compliance with the fuel economy standard achievable, in light of

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22/ Coffee, Corporate Misconduct, 63 Virginia Law Review 1099, at 1241 (1977).

available technology, production circumstances, and other similar factors;

2) what actually lead to the non-compliance of the corporation (a failure of adequate planning for production of models with significant fuel economy, for example);

3) what role did the directors play in the failure to meet the standards; and,

4) what was the loss to the corporation as a consequence of not being in compliance with the fuel economy standards.

Perhaps, the last issue of fact presents a significant issue, for it is often stated that more expensive, lower-mileage automobiles provide the largest profit margins to manufacturers. If that could be legally demonstrated, the non-compliance with the federal fuel economy standards could not be viewed legally as simply resulting in financial losses to the corporation because of payment of possible civil penalties. Instead it could be argued that the net financial effect on the corporation should be used to determine whether the corporation has actually sustained a loss, for which there might be potentially liability on the part of the directors. Although the penalties for non-compliance with the fuel economy standards are potentially large where the average mileage falls substantially below the standard, the penalty may not be as significant when compared with the profits earned from the production of low-mileage automobiles. In effect, the net financial result that would have occurred from compliance with the fuel economy standards might be compared with the result that did occur.

Obviously, the actual profits and financial results of compliance could yield a range of results depending on the circumstances of that auto maker.

But the important point is that the actions of the directors in deciding not to comply, or resulting in non-compliance, might not have injured the corporation when compared with what would have occurred if there had been compliance. That this kind of analysis would be used by directors to defend their actions would seem quite likely, since the nature of a derivative suit is equitable, and an equitable action would not allow shareholders to argue only the loss of the civil penalty to the corporation, while ignoring the increased profits that might be obtained by decisions to produce various models.

Moreover, arguments about the comparative effect of non-compliance—even where a net loss could be shown to the corporation--might not be viewed by a court as negligent as a matter of law when other possible factors are considered. For example, expansion of market share, or the willingness of the corporation to sustain short-term penalty payments for the purpose of achieving a longer term financial advantage well beyond those losses might also be considered as a possible defense by the directors. In fact, arguments like these are precisely the reason why the courts rely upon the business judgment rule to avoid second guessing management.

Conclusion

For all the reasons discussed above, it appears that the legal concept of the business judgment rule would offer a significant defense to directors of an automobile manufacturing concern faced with a derivative action based upon non-compliance with federal fuel economy standards. While the merits of such a suit cannot be judged in advance because of the important and, perhaps, determinative, factual circumstances that might be alleged to sustain such a suit, the threshold legal and factual issues would seem to make success of such a suit extremely difficult. Obviously, the law does not prevent the filing of lawsuits or the need to defend them. And as has been observed, derivative actions have often been subject to abuse by shareholders, so that it cannot be said that derivative suits will not be brought. But, again prevailing in such a suit will require the plaintiff-shareholder to sustain substantial legal and factual burdens.

Two final points might be made with respect to the federal fuel economy standards. First, there are really very few regulatory options available to the Congress to impose and enforce federal fuel economy standards. Certainly, the existing level of civil penalties could be reduced, but if there is some theoretical liability of directors as the result of derivative actions such a reduction would not immunize liability. Civil penalties also involve a lesser sanction than criminal penalties that might have been imposed. But it is difficult to conceive of an enforcement mechanism to require compliance with the fuel economy standards that would not expose directors to some potential liability through derivative actions, unless Congress were to simply make express provision against such derivative actions. The granting of immunity from possible derivative actions to directors could have an effect that runs counter to the public policy of the fuel economy standards by encouraging non-compliance and shifting liability burdens directly to corporate shareholders rather than requiring the good faith efforts of compliance with the standards through corporate policies developed by directors and corporate management.

Second, the concept of the derivative action must be regarded as incidental to the public purpose undertaken by Congress in establishing the fuel economy standards. It should be noted that in establishing the fuel economy standards Congress sought to impose the requirements without total preemption or intrusion into traditional state corporate regulation. Although Congress did preempt the ability of states to establish fuel economy standards while federal standards were in place,[23] it seems unlikely that this statutory preemption would be construed to shut off incidental corporate remedies--such a derivative suits--arising out of non-compliance with federal standards.

Thus, to the extent that your inquiry arises out of concern over possible corporate director liability in possible derivative actions relating the non-compliance with fuel economy standards in the context of possible legislative modifications that might foreclose director liability, it should be observed that Congress obviously possesses the legislative power to modify the statute and reconsider policy concerns over possible director liability. It cannot be said, in the absence of controlling judicial precedent, that definitive legal liability of directors could presently arise because of non-compliance with the federal fuel economy standards.

We trust that the foregoing has been responsive to your inquiry.

Robert D. Poling
Robert D. Poling
Specialist in American Public Law
American Law Division

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[23] See, 15 U.S. Code Section 2009(a) and (b), which provides: "(a) [w]henever an average fuel economy standard established under this subchapter is in effect, no State or political subdivision of a State shall have authority to adopt or enforce any law or regulation relating to fuel economy standards or average fuel economy standards applicable to automobiles covered by such Federal Standard." (emphasis added).

Statement of Martin L. Anderson
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Submitted to the Senate Energy and Natural Resources Committee
"Corporate Average Fuel Economy Regulation"
May 14, 1985

Mr. Chairman and distinguished members of the Committee, I am pleased to submit this statement concerning Corporate Average Fuel Economy (CAFE) regulation, a subject I have followed in detail for some years. I am currently an international industry analyst and consultant, following the global motor vehicle and related industries. I am co-author of "The Future of the Automobile" a book reporting the findings of the Massachusetts Institute of Technology international auto program, of which I was Executive Officer.

During the late 1970's, I performed some of the fundamental industrial analyses under the "economic practicability" side of the CAFE regulations while employed by the U.S. Department of Transportation. My analysis of that period indicated CAFE was a flawed approach to national fuel conservation, and events of the past 8 years have borne this out. Since that time, I have evaluated the global industry in much more detail, including the fuel conservation policies and achievements of other motorized nations, and my conclusions are even more firmly reinforced by this international perspective.

I would like to clarify that I am not acting as an advocate of any company or position in this debate. The current debate on CAFE is too narrow, and I believe focussed in the wrong direction for national fuel conservation and national industrial health. The debate deserves a broader perspective, where the flaws of an old policy become visible, and economically sound policies more evident.

The arguments on CAFE have always been complex, but the truth of the policy is actually quite simple. CAFE has always ignored the fundamentals of national fuel consumption, the behavior of more than 150 million persons, and the reality of the motor vehicle market---plain and simple. This truth has been hidden behind arcane technical and economic jargon, and was obscured by the unrelated second oil shock.

Controversy again surrounds CAFE for the third time since 1975. Since then auto companies chasing consumer demand and investing about $80 billion have doubled domestic car mileage to about 26 mpg, where consumers currently rest on fuel prices lower than the dreams of 1975 price controllers. But ignoring consumers, CAFE requires 27.5 mpg or expensive fines, and multi-product companies are stuck until they can once more shrink six passenger cars, or revive diesels killed by cheap gas.

We should celebrate America's reaching European-style mileage, but some want to re-create the controversy of 1975. The drama was off the mark then and remains misdirected, because CAFE dismisses American consumer behavior, but consumer behavior determines national fuel consumption. It is time to recognize the achievements of American consumers and companies, and to address facts obvious worldwide--consumers consume fuel, car companies do not consume fuel, and car companies do not control consumers. Those who define energy policy as a drama in which good conservationists battle the bad motor companies, are serving poorly both the nation's conservation efforts and the revitalization of American manufacturing.

Review the plain truth. We are more than 150 million drivers, operating roughly that many vehicles. And we drive about 1.5 trillion miles every year. Our driving towers over every other factor in national gasoline consumption, including the miles-per-gallon (mpg) rating of new cars.

Notice the orders of magnitude in Exhibit 1, and the relation between driving and national fuel consumption in Exhibit 2. This is the fundamental reality in national fuel consumption, and CAFE has very little influence on the equation. Driving consumes fuel and is independent of new car-mpg. Any gains in new car mpg can be easily countered by minute changes in consumer driving patterns.

Consumers don't respond to CAFE---most of them don't even know it exists. Consumers respond to the economic realities of their own lives, which in this case means a combination of their driving needs and fuel prices (or gas lines). There is one fundamental thing which changed the fuel consumption behavior of consumers, their preference in car size, and their driving habits---the price of fuel. Many claim this benefit for CAFE, but that is simply false.

Examine not only Exhibit 2 but the gasoline consumption and price chart in Exhibit 3. These monthly data show very clearly that consumers consume fuel largely in response to price. The results are even clearer when these nominal fuel prices are adjusted for inflation. It was not surprising that consumption rose between the two oil shocks, real fuel prices were declining. In 1979 a steep jump in fuel price and the fear of gas lines, not CAFE, pushed consumers to cut driving, conserve fuel, and shift to smaller cars. A steady decline in nominal and real gas prices has quite predictably brought consumers back toward larger cars, not just at the large-car end of the market, but within each size class right down to the mini-cars.

These are the influences on national fuel consumption, and CAFE in no manner addresses the price of fuel or the size of consumer families (the number of seats they need).

CAFE tries to cut national fuel consumption by enforcing a convoluted average on motor producers and, therefore, on new car buyers. But since there are more than 150 million fuel consumers and only 10 million new car buyers, and because driving, not purchasing cars consumes fuel, CAFE is the economic equivalent of trying to extinguish a candle by blowing backwards through the narrow end of a funnel---it wastes national breath and does not directly address fuel consumers.

CAFE not only ignores consumer demand it affects productivity with little corresponding benefit. CAFE not only forces the sale of small cars no matter how few consumers want them, it forces changes in all cars across the range, purely for the mathematics of the rigid averaging equation, with almost no real benefit in national fuel conservation. As consumer preferences modulate among various vehicle classes, producers are forced into a ridiculous situation of holding back popular options like air conditioning, or discounting further low-profit margin cars. These uneconomic adjustments don't benefit anyone. To one needing a six-passenger car, the mpg adjustment is meaningless. He or she measures fuel economy not per-car, but per-seat-needed. On a person-carried basis, a 20 mpg six passenger car can be much more efficient than a 30 mpg subcompact carrying one person. CAFE may ignore this truth, but not car buyers. At the depths of each oil shock, 40% of car buyers still wanted larger cars, not because they were ignoring economics but because they know their family size and driving needs best. They know a car's mileage rating does not determine its useful efficiency or threaten national security.

Why should we place such unproductive surprises in front of all our motor companies? Even companies who today praise CAFE because they temporarily meet it, were protesting loudest against it only 5 years ago. This shows the artificial nature of today's drama, and the contortions produced as markets change around rigid non-market CAFE standards. Chrysler meets the standard not only because of extreme hard work on their part, but also because they ran out of capital to keep their largest rear drive cars alive, and were directed elsewhere during the government loan act period. Other domestic and import companies miss the current standard largely because diesels died and a because consumer demand has shifted toward heavier vehicles (not always most profitable) in every segment of the market. This has had almost zero effect on national fuel consumption compared to driving increases, but owing to the averaging calculation these buying changes have had noticeable effects on single companies. Times change, and conditions can flip once more. This is not a battle between complying and non-complying companies. It is the bad chemistry between a rigid mathematical calculation and a volatile market.

I find even more disturbing CAFE's complete ignorance of international competition. Many import companies meet CAFE not because they are more responsive to the US government than US producers, but because of, again, the simple realities of fuel and motor vehicle economics. Note Exhibit 4, which shows international petrol prices corrected for swings in exchange rates and inflation.

Once again the facts are straightforward. For the past 20 years, the US fuel price has been roughly half the world level. The industries outside the US (including the foreign divisions of US companies) have responded to the very different consumer demand caused by these fuel prices, and therefore have been making smaller cars with smaller engines.

We passed a law which basically restricts the size of cars one is allowed to sell in this market. We let offshore producers import their ready-made vehicles to meet this mix requirement, but we denied our own producers the ability to use their own existing investments and research in small cars offshore to ease the transition to a newly-saleable small car mix in the US. Almost all non-US producers could meet our new law using older cars, but US producers had to put investment in every US car line (the bulk of their global sales) and could not even buffer short term market fluctuations with small percentages of imports from their offshore plants with extra capacity. On the surface this might sound quite "pro-America", but forcing one's own car companies into double investment while offshore companies ride a normal product cycle is simply poor policy in international competition.

Thus CAFE misses consumer demand, and it mixes local content regulation with conservation policy. MPG rules plus local content do not conserve fuel, the alleged national goal. But the fact that fuel remains half price in the US and that our producers cannot balance their international investments with their domestic ones, means the mix of these policies under CAFE will randomize the future of domestic companies to a much greater extent than non-US companies. Forcing companies to plant apples and pears doesn't help the economy produce oranges.

In the atmosphere of 1975, where we felt fuel was dear but US company finances unlimited, one might have excused a policy which overlooked both home and world markets. But the extremely harsh lessons of international competition we have learned since then mean that a "domestic-only" perspective in an international market is simply unjustified.

The current debate is whether the government should recognize consumer demand, and use its existing discretion to drop CAFE from 27.5 to an equally legal 26 mpg, just where consumers have independently moved.

In the morality play, this is being accorded grave consequences. But the truth is the difference in national fuel consumption between the two options is less than the effect of a tiny percentage change in driving. We could severely fine auto companies for our own car buying behavior, and then we could wipe out the alleged national fuel savings with a couple of additional ski weekends or a trip to visit relatives. Despite the hyped-up good news last year, currently dropping auto profits should warn us not to be cavalier in our policy-making.

CAFE provides an easy political stage because one can crusade against car companies, without addressing the real fuel consumers--us. But the fantasy is tired and unproductive, and it's time to use the lessons of the past ten years to address reality. If we want to reduce fuel consumption, then raise the price of fuel as every other motorized nation has done; it's the only measure which really works. If that is beyond our desire, or courage, then we should recognize that we consumers have chosen to consume fuel at our present level, and we should not create additional problems for an industry who is far from out of the woods, and on whom we might want to depend for part of our economy in the 1990's.

EXHIBIT 1

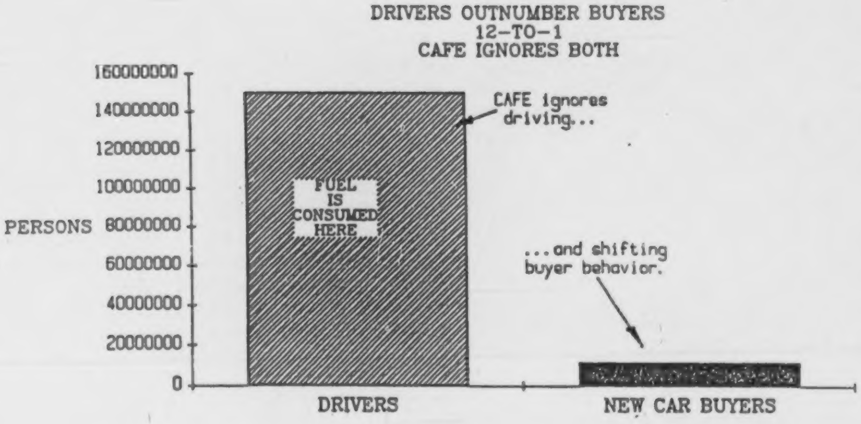


EXHIBIT 2

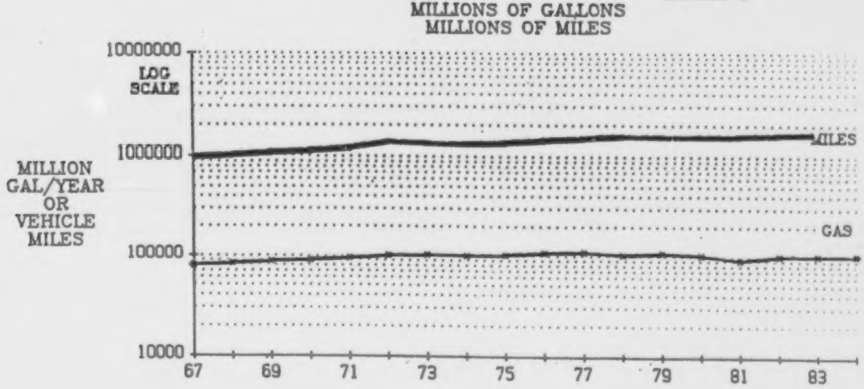


EXHIBIT 3

US GAS USE AND PRICES

MONTHLY 72-85

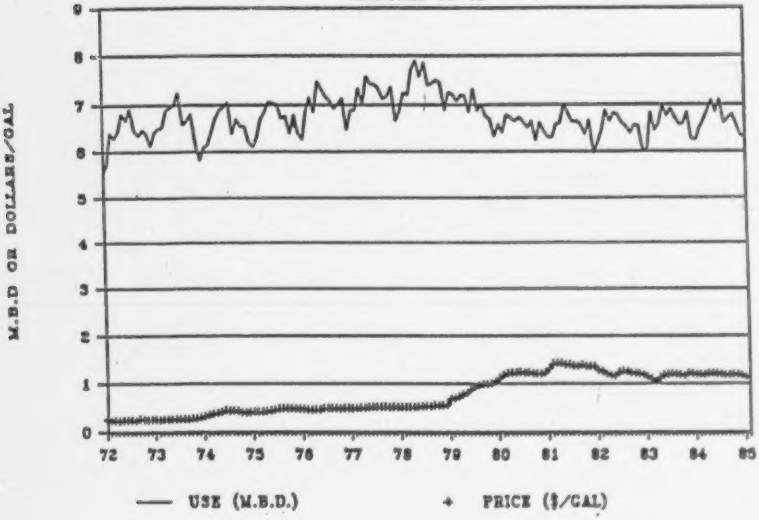
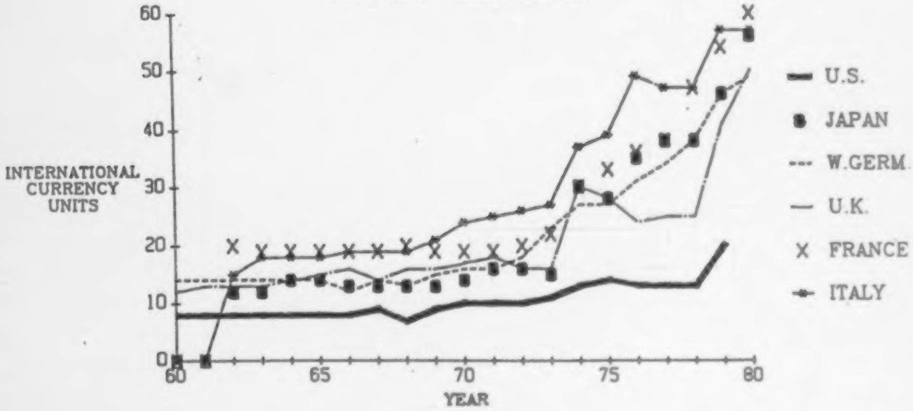


EXHIBIT 4

WORLD GAS PRICES
CURRENCY-CORRECTED



Testimony

of

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Visiting Associate Professor
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and

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before the

Subcommittee on Energy Regulation and Conservation
Committee on Energy and Natural Resources
Senate of the United States

on

Automobile Fuel Efficency Standards

14 May 1985

Introduction

Senators, staff, and other interested people: I am honored and pleased to be able to testify in these hearings on the Corporate Average Fuel Efficiency (CAFE) standards. Let me introduce myself. My name is Kenneth Train. I am a specialist in the economics of regulation and industrial organization, with emphasis on the markets for automobiles and energy. I teach in the economics department at the University of California, Berkeley, and do research through the firm of Cambridge Systematics. I am on the editorial board of Transportation Research, which is one of the leading transportation journals in the field. I have published numerous articles on automobile demand and energy use in academic and professional journals and have recently completed a book on automobile demand that, after extensive peer review, is being published by MIT Press as part of its series on Quantitative Methods for Transportation Analysis. I therefore bring to my testimony today the perspective of an economist with an analytical bent. From this perspective, I would like to make one small point that, while prevalent in the economics literature, seems to have escaped notice in the discussions of the CAFE standards. While the point is itself small, I think its implications for the debate are quite large.

I have heard many times from many people that the CAFE standards are an impediment to the workings of a free market and that if the market were allowed to operate freely without governmental interference then manufacturers would produce the type of cars that consumers want. Representatives of auto manufacturers have expressed this view by saying that if consumers were willing to pay for more fuel efficient vehicles, then manufacturers would, in their desire to make profits, certainly produce them. The basic idea being expressed in these statements is that, in a freely operating market, firms will produce the types of products (in this case, types of cars and light trucks) for which consumers are willing to pay more than the costs of production.

While this statement may appear at first consideration to be obvious, it is not, in fact, generally correct. A wide body of literature has arisen in the economics journals indicating that firms in a freely operating market will not necessarily produce the types of products for which consumers' willingness to pay exceeds the costs of production. There are natural forces in free markets that (i) prevent firms in an industry from producing some goods for which the amount that consumers are willing to pay exceeds the costs of production, and (ii) induce firms to produce other products for which the amount consumers are willing to pay does not exceed the costs of production.

Before discussing why this is the case--that a free market will not necessarily produce the "correct" mix of products based on consumers' willingness to pay--I would like to make two clarifying statements. First, let me state up front that I do not know whether, in the specific case of automobiles, manufacturers would, without regulation, produce the "wrong" set of vehicles based on consumers' willingness to pay, or whether CAFE standards would be effective in correcting any deficiencies. The type of study required to answer those questions would be very complex, involving analysis of consumer preferences, cross-elasticities of demand, manufacturers' behavior, costs, entry possibilities, and so on. I have not performed such a study, nor do I know anyone else who has. What I am saying is that the idea that manufacturers will produce the correct types of goods is not true in general. Thus, insofar as the move to reduce the CAFE standards is based on a belief that a free market will in general produce the right products, then such reduction is misguided.

Second, an important distinction is needed that will clarify the remaining discussion. It is a well-known tenet, and one of the bases of economics as a field of study, that a competitive market system will result in manufacturers producing the "correct" quantities of goods. Furthermore, numerous studies have shown* that even when the market has impediments and is not perfectly competitive that the loss to society is fairly small. As a consequence, many, perhaps even most, economists feel that--unless there are specific and important market failures that require regulation--a free market system operates in the interest of society in determining the quantities of goods to be produced in each market.

It is important to note that this belief does not contradict the corresponding belief that a free market will not in general produce the correct types of products. Two separate questions are being addressed. (1) Does a free market produce the correct quantities of goods given the types of goods produced? And (2) does a free market produce the correct types of goods? The arguments in favor of a free market have generally addressed the first question. But an affirmative answer to the first question does not imply an affirmative answer to the second question. Since the CAFE standards attempt to condition the types of vehicles produced (restricting production of vehicles with high fuel consumption per mile and inducing production of relatively fuel efficient vehicles), it is with this second issue--not the issue of quantities given the types of products--with which we are primarily concerned in examining the CAFE requirements.

Explanation

I would now like to explain, in as general and intuitive a way as possible, why manufacturers will not in general produce the correct mix of products, when the correct mix is based on a comparison of consumers' willingness to pay with costs of production. It is important to realize that these ideas are not mine alone, and in fact did not originate with me. As I describe in the last section of this testimony, these ideas have developed over time through numerous articles to the point that they have become mainstream concepts in the field and are included in leading undergraduate and graduate textbooks.

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*For a review, see section 20-2 of W.G. Shepherd, The Economics of Industrial Organization, Englewood Cliffs, NJ: Prentice-Hall, 1979.

Different consumers have different tastes and consequently would like to buy different types of goods. For example, some consumers care more about fuel efficiency and less about size and performance, while others have opposite preferences; more generally, there is a range of consumers with respect to how much they care about fuel efficiency relative to other vehicle attributes.

Introducing a new product (for example, a car with a different--perhaps only slightly different--set of attributes than those currently being marketed) has two relevant effects. (1) Some consumers will prefer this new product to those previously available; these consumers will be willing to pay more for this product than for those previously available. (2) There is a cost associated with producing the product, namely, the cost of designing, manufacturing, and marketing the product, plus a normal profit.

To buy the new product, consumers must pay the price that is charged for the product. Consequently, part of the amount that consumers are willing to pay for the new product is transfered to the producer in the form of revenues. Insofar as the amount that the consumer would be willing to pay exceeds the good's price, then there are excess benefits beyond the revenues obtained by the producer. In the economics jargon, this excess willingness-to-pay is called consumers' surplus.

A new good should be produced if the total amount that all consumers combined are willing to pay for the good--which consists of the additional revenues to producers plus the consumers' surplus--exceeds the costs of production. There are two basic reasons why a producer's decision of whether or not to produce the good will not in general coincide with this criterion.

1. The manufacturer cannot in general collect in revenues the entire amount that consumers are willing to pay, and hence will not necessarily produce a good for which consumers are willing to pay more than the costs of production.

First let me describe why there is in general some consumers' surplus beyond the revenues collected by producers; then I will explain how the existence of this consumers' surplus can lead to some goods not being produced that should be.

Each consumer is willing to pay a certain amount for the new good. Since different consumers have different tastes, different consumers are willing to pay different amounts. If a producer sets one price for his good which all buyers must pay (as opposed to a separate price for each consumer), then each consumer who is willing to pay that amount or more will buy the good, while consumers who are not willing to pay that much will not buy the good. Consumers who are willing to pay more than the price set for the good receive benefits in excess of the price they must pay: these excess benefits are the consumers' surplus. (Raising the price of the good so as to capture more of these consumers' willingness-to-pay will not necessarily help the producer, since those consumers who are willing to pay exactly, but no more than, the current price will no longer buy the good at a higher price.)

The producer might be able to charge a separate price to each customer. In this case, however, there would still be a consumer surplus as long as the producer does not perfectly know the amount that each consumer is willing to pay. If the producer charged a particular consumer a price above the amount that he was willing to pay, then the consumer would not buy the good and there would be no benefits and no revenues. However, if the producer charged a consumer a price below what he is willing to pay, the consumer would buy the good and obtain benefits in excess of the revenues obtained by the producer. Therefore, there will exist a consumers' surplus.

The fact that there in general exists a consumers' surplus (i.e., that producers cannot extract as revenues the full amount that each consumer is willing to pay) has important implications for the question of whether producers will necessarily produce the goods for which consumers are willing to pay. A new good should be produced if the total amount that consumers are willing to pay--which consists of the revenues obtained by producers plus the consumers' surplus beyond these revenues--exceeds the cost of production. However, the producer will produce the good if revenues exceed costs,* ignoring the consumers' surplus.

Since the producer ignores the consumers' surplus, it is possible to have a situation in which the total amount consumers are willing to pay exceeds the costs of production such that the good should be produced and yet revenues fall short of the costs of production such that the producer will not produce the good. Stated in the most succinct fashion: since consumers' willingness-to-pay includes both producers' revenues and consumers' surplus, it is possible for consumers' willingness-to-pay to exceed costs while revenues alone do not exceed costs, leading to the good not being produced when it should be.†

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*Costs, you will recall, include a normal profit.

†The reason an analogous discrepancy between social perspective and producers' decisions does not occur in the choice of quantity of goods, given the types of goods produced, is simple. In a competitive market, the producer, while he does not extract in revenues the full amount that all consumers are willing to pay, does extract the full amount that the "last" consumer is willing to pay (i.e., the consumer whose reserve price exactly equals the price of the good). Therefore, in choosing whether a unit should be produced and sold to this "last" consumer, the social perspective (based on comparing willingness-to-pay with costs) is the same as the producer's perspective (based on comparing revenues with costs). In a word, there is no consumers' surplus for the last unit produced, and so in deciding whether to produce it, consumers' willingness-to-pay for the unit exactly equals the producer's revenues from it.

2. Each manufacturer will decide whether to produce a new type of good on the basis of the effect on his own profits rather than the profits of the industry as a whole.

When one manufacturer introduces a new type of product, the demand for other products changes such that other firm's profits are affected. For example, consider a manufacturer who introduces a new vehicle that is similar to that of a competitor. Some consumers will shift to this new vehicle, reducing the demand and hence revenues of the competitor. In introducing a new product, a manufacturer is concerned about his own profits. However, from a social perspective, the profits of all firms are important. A gain to one firm that is obtained through a loss to another confers no net benefit from a social perspective; it is simply a transfer.

A new good should be introduced if the benefits of its introduction exceed the costs. Benefits are the addition to revenues for all firms (i.e., the gain in revenues to the producer that introduces the good minus the loss in revenues to other firms) plus the benefits obtained by consumers beyond the amount they must pay in price (i.e., consumers' surplus). However, the manufacturer will introduce the good if the additional revenues that he individually receives from the good exceed the costs of production, independent of the effect on other firms' revenues. Thus it is possible to have situations in which total benefits (consisting of consumers' surplus, plus the additional revenues to the firm introducing the new good, minus the loss in revenues to other firms) fall short of the costs of production and yet revenues to the firm introducing the good exceed costs. In these situations, the firm will introduce the good even though, from a social perspective, it is not desirable to do so.

Support

As I stated above, these ideas are not mine alone and are not new. They have been expressed in different ways in numerous articles, each starting from a slightly different set of assumptions about demand, market structure, firms' behavior, the possibility of entry by new firms, and costs. The ideas have become part of the mainstream concepts in the field of industrial organization to the point that they are included in textbooks in the field. For example, a review of the literature along with a graphical explanation is given on pages 384-405 of F.M. Scherer's Industrial Market Structure and Economic Performance,* a leading undergraduate text in the field. A more mathematical treatment (though still fairly intuitive) is given in the recent textbook by M. Waterson, Economic Theory of the Industry.†

It is interesting to note that, after describing the results of numerous articles on the topic, Waterson summarizes the findings of these articles in the following way:

> The general point is that monopolistic competition, spatial competition, Lancaster's model, or whatever, can give either too many or too few products. It is not hard to see why, intuitively. An individual firm considering introducing a product will not take into account consumer surplus. It is the fact that profits do not represent all the social benefits to be obtained from its introduction, which is a force making for too little variety. On the other hand, the firm will not take into account either, the detrimental effects on demand for other firms' products of introducing a substitute, which is a force acting toward there being too many products. (pp. 126-127)

These are precisely the two factors I described above. The overall conclusion is that: the free market cannot necessarily be relied upon to produce the products that should be produced when comparing consumers' willingness to pay with costs of production. Thus, insofar as the belief that a free market will in general produce the right products underlies the move to reduce the CAFE standards, then such reduction is misguided.

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*Chicago: Rand McNally, 2nd ed., 1980.

†New York: Cambridge University Press, 1984.

Statement of
Dr. Elihu Bergman
Executive Director

AMERICANS FOR ENERGY INDEPENDENCE
Washington, DC

Submitted to the

Subcommittee on Energy Regulation and Conservation
Committee on Energy and Natural Resources
United States Senate
Washington, DC

June 3, 1985

Mr. Chairman and Members of the Committee:

We appreciate the opportunity to present the views of AMERICANS FOR ENERGY INDEPENDENCE on changes in automotive fuel efficiency standards (CAFE) sought by two automobile manufacturers and endorsed by the Departments of Energy and Commerce.

Our position can be summed up in two words: "No way." Moreover, we are astonished that the Federal government now has set aside an obvious public interest in this issue to join in the effort by Ford and General Motors to gut fuel efficiency standards.

The establishment of targets for automotive fuel efficiency in the 70's provided both an incentive and an instrument to conserve gasoline in passenger vehicles and thereby achieve significant reductions in U.S. oil demand. The reduction in oil consumption has enabled us to reduce our oil dependence and break the hammerlock that the OPEC countries exercised for a time on oil prices.

With storm clouds on the horizon that suggest an increase in the need for U.S. imports in the 90's, this is no time to forfeit effective leverage for continuing reduction of oil consumption. Given the disturbing signs, now is the time to put in place measures that will protect us in the 90's. Fuel efficiency standards is one of them.

Recent disclosures of sharply declining U.S. oil production in the 1990's should inject new anxiety in the prevailing complacency about the national energy condition. Two authoritative U.S. government sources estimate that by the end of the century domestic production will be cut in half.

The most recent projection came from the Interior Department's Geological Survey, which forecasts a production drop of more than 50%. Alaska alone, which has been viewed as the last major U.S. oil frontier, becomes an oil disappointment in Interior's new projections, with a decline of more than 70%. The new North Slopes in Alaska have not been found, and prospects for them are fading.

Several months before Interior released its bad news, the Congressional Research Service, another highly respected source of oil forecasting, projected that domestic production would decline by as much as 30% below current levels by the year 2000. Other government, industry, and think tank sources agree with CRS and Interior, if not on exact levels, at least on general trends and magnitudes.

Improved mileage efficiency of American cars is therefore a high ticket item, for it will help us withstand the national energy security threat we will experience in the 90's when domestic oil production declines and the demand for imports increases. About 60% of U.S. oil consumption goes to make gasoline for our cars. This requirement translates into about 6 million barrels of oil a day. If average fuel efficiency of the passenger fleet were doubled, the oil needed for gasoline production could be cut in half, with a saving of 3 million barrels a day -- the amount by which U.S. imports will increase by 1995.

In 1984 the average performance of American cars was 17.5 miles per gallon. At this level, fuel efficiency was up 25% from the all time low of 13.5 MPG in 1973. But we can do a lot better, with a lot more benefit to the nation. Doubling the 17.5 performance to 35 miles per gallon would cut in half the amount of oil needed for gasoline production.

A 35 MPG target is not unrealistic; it is achievable in the 90's. Many cars on the road today, including some mid-sized models, are approaching it. And some of the state-of-the-art projects for the late 80's, notably GM's "Saturn" program, are talking about 60 miles per gallon.

But we cannot rely on the automobile manufacturers alone, operating in a pure marketplace environment, to persist in this effort. The marketplace is fickle, and the manufacturers are in business to maximize profits; not protect the national interest.

As an exmple, Ford and GM claim that declining gasoline prices have created increased demand for larger cars and that the demand must be met to protect the free market economy. What they fail to mention is the obvious: Larger car sales turn higher profits than small car sales. But profitablity in the automobile industry can be consistent with greater fuel economy. Although Chrysler's profits have been lower than Ford's and GM's, due to a concentration on fuel efficient car sales, Chrysler was nonetheless able to turn a healthy profit in 1984 while meeting the CAFE standards.

Until we have the national interest in energy secured, which means eliminating our vulnerability to market manipulations of foreign oil producers, the government must stay involved. If the Administration forfeits the responsibility for continued involvement and leadership because of some romantic notions about the marketplace, then it is up to Congress to fill the void. The stakes are simply too high to treat energy preparedness with an ideological bias that the Administration misguidedly prefers. Backsliding on fuel efficiency standards, as Ford and GM seek and the Administration supports, exposes the country to an unnecessary, and even intolerable risk.

We know from the experience of the early 80's how oil dependence and the resulting price shocks savage the economy. The second oil price shock in 1980, which doubled oil prices within the year, drained $1 trillion in growth out of the economies of the Western industrial nations and triggered the round of inflation, unemployment, high interest rates, and other pathologies of recession in which the United States shared. In light of this experience, the Department of Commerce is especially myopic in claiming that a relaxation of fuel efficiency standards will create employment.

Ironically, as the Department of Commerce should well understand, if we set ourselves up for another oil crisis the automobile industry in this country and its hundreds of thousands of workers stand to lose at least as much as any other sector of our economy; an upward surge in oil prices and shortage of supplies will mean another American run on foreign cars, whose manufacturers have clearly demonstrated a superior grasp of the long-term oil situation and its implications for the automobile market. Surely the American people, who will suffer enough in the event of another oil crunch, should not be expected to pay for the inexcusable lack of foresight on the part of our own automobile manufacturers with another round of bail-outs and quotas on foreign car imports.

It could all happen again, if we let it happen. Whatever our present good fortune, oil remains the Achilles' heel of our energy system, and thus of our economic system. The projections for the 90's portray an opportunity for OPEC to once more seize control of the oil market and trigger another price spiral. Our agenda for today must be to set in place the deterrents that will continue to reduce oil consumption, and simultaneously our vulnerability, while contributing to the prevention of another economic victimization. The maintenance and increase of mandatory fuel efficiency standards is a vital ingredient in the protective mix.

Thank you, Mr. Chairman, for the opportunity to present our views.

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